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Original Articles.

A CASE OF TEMPORARY BLINDNESS FOLLOWING CHILD-BIRTH.

By E. C. Brush, M.D., Corning, Ohio.

On December 17th, 1883, at six o'clock a.m., Mrs. W., of this place, gave birth to a large female child, it being her fifth confinement. The labor was short and *very* easy, a few pains expelling the child and the placenta. There was no unusual hemorrhage and the patient congratulated herself on feeling so well and upon having so trifling a labor.

At 4 p.m., same day, I visited her and found her feeling well, all doing nicely, but that night, at one o'clock, I was sent for and found her suffering with intense frontal headache and also complete loss of sight. The latter she had discovered about an hour before my arrival. The room, to her, was dark and she asked her husband "why he had taken the lamp away?" He replied that the lamp was on the mantel as usual and she realized that she was blind.

I gave opiates to relieve the pain and on inquiry and examinination found everything as it should be, except the headache and blindness. Pulse 76 beats per minute; no fever; waiting until the medicine had somewhat relieved her suffering I went home.

Dec. 18th, 9 a.m. Headache entirely gone, patient feeling well in every way but still blind.

7 p.m., same day. Patient has felt well all day; taken some nourishment; says she "thinks she can tell whether the lamp is in the room or not." No fever; pulse 100. This high rate of pulse I attributed to too much excitement, caused by visitors, and left orders for no one to enter the room but those needed.

Dec. 19th, 9 a.m. Mrs. W., thinks she can distinguish the windows and "sees shadows when any one passes between her and the light. Pulse 99, no fever.

6 p.m., same day. Sight slightly improved during the day. Pulse 96.

Dec. 20th., 9 a.m. Patient slept well all night. Had an evacuation of the bowels without aid. Says she can "make out her friends but their faces look like wax-work and their eyes like bright dark beads." Pulse 100.

Dec. 21st, 10 a.m. Can see much better, but when she shuts her eyes she sees all the colors of the rainbow, and last night when she looked under the covers at the baby "it seemed to have a halo around its head."

Dec. 22d. Sight still improving. Patient feels first rate.

Dec. 23d. Can see good sized print, but at times has pain through the eyeballs.

Christmas she could see as well as ever and in every respect was improving.

Mrs. W. is a well-formed robust woman. She claims to have gone three weeks over time and the last two months of her pregnancy was troubled with sore throat. The writer does not offer any theory or try to explain this strange case. There was no flooding; hysteria she never had; there is no family history; no disease before or after pregnancy (except sore throat); no complication during the labor to account for or cause the trouble. The confinement and subsequent recovery was all any woman or physician could wish.

There was really nothing out of the usual order of things, except a few hours headache easily relieved, and the fact that she was entirely blind for about thirty-six hours and for a few days partially so. The recovery of sight was very gradual as can be seen from this report. Had an ophthalmoscopical examination been made it might have revealed some cause and it *might* not. This would have been done had it been practicable. The appearance of the eyes was as usual and the pupils acted properly.

Some works on obstetrics mention cases of this kind following complications, such as flooding, severe labor, etc. Cazeaux knew of or mentions one case and that followed flooding.

CASES FROM PRACTICE.

By H. v. Sweringen, A.M., M.D., Fort Wayne, Ind.

Sunday night, January 6th, 1884, called to a case of obstetrics, Mrs. S—, on Jackson street, Fort Wayne. Present, when I arrived, midwife and Dr. C. S. Smith, the family physician. Informed by the doctor that we had a shoulder presentation; examined, and pronounced it a knee presentation; examined a little further, and found an elbow, and, a little later, a hand; Dr. Smith's diagnosis confirmed; reached up still further and, with comparative ease, brought down one foot; reached up again and could not get the other one; tried and sweat and fumed for a considerable lapse of time, but without success; finally, flexed the leg upon the thigh of the limb brought down, pushed up against the knee, which changed the position of the other leg, and enabled me to grasp the foot of the same; did so; brought down *both* feet and soon delivered a

living child which, with the mother, are doing well at this writing, thirty-six hours after delivery.

Monday morning, January 7th, 1883, 3 o'clock. Called to a case of obstetrics. Present, when I arrived, same midwife as in preceding case. The patient, Mrs. Weisenberger, was within three weeks of her expected time; that part of her bedding in proximity with the organ affected was saturated with blood, of which a considerable pool was discovered under the bed; examined and found os dilated to the size of a silver dollar and dilatable; membranes ruptured, cord prolapsed and something which I concluded was either a large proportion of the placenta or a very solid clot of blood; the hemorrhage had now ceased, although there was some oozing; the patient was very weak, faint and dizzy; lowered the head, elevated the hips and concluded to tampon for a short time only, until she would rally from the shock her copious hemorrhage had induced; in the meantime had the friends send for their family physician, which proved to be Dr. Carl Prœgler, a very intelligent and well posted practitioner of Fort Wayne. After reaction was sufficiently established, I removed the tampon, discovered the os much more dilated and the shoulder of the child presenting *with* the cord and about one-half of the placenta, a part of which latter was removed before manipulations were commenced; the cord was pulseless at the first examination; when tamponed, she took a teaspoonful of fluid extract of ergot every hour; after everything was in readiness, with the assistance of Dr. Prœgler, I turned and delivered the woman of a dead babe. At this writing, twenty-four hours after delivery, her pulse is 100; did not take her temperature; she feels cheerful; no evidence as yet of any impending danger; believe she will recover.

REPORT OF A CASE OF ABDOMINAL TUMOR, SOMEWHAT RESEMBLING PREGNANCY, IN A YOUNG MARRIED WOMAN.

A paper read before the College of Physicans of Philadelphia, Dec. 5, 1883.

By JOHN H. PACKARD, M. D., Surgeon to the Episcopal Hospital and to St. Joseph's Hospital.

I venture to hope that the following report of a case presenting some unusual features may be of sufficient interest to warrant me in bringing it before the College:—

Mrs. G., aged 21, a very slim and delicate looking woman, consulted me on the 21st of July in regard to a slight and uniform abdominal enlargement, which had been first noticed by her shortly after her marriage about three months previously, and had been gradually and steadily increasing. She menstruated regularly every month, and had had no nausea. Neither the breasts nor the nipples showed any change from the virgin state.

There was no tenderness at any point in the abdomen, and the appearance and feel of the swelling were very much such as would be presented in the early stages of pregnancy.

On the 26th I saw her again, and made an examination per vaginam. The os uteri was soft, and the cervix was of some length; but there was a bulging above, as if the uterus contained a mass partly solid and partly liquid. I did not of course think it right at this time to introduce a sound, as, in spite of the absence of rational sign, the presumption seemed to me to be in favor of pregnancy. One fact seemed to militate against this view, viz., that she rather lost than gained flesh.

I declined to express any opinion as to the character of the swelling, but told the husband that my hope was that the case would prove to be one of pregnancy, as it was likely otherwise to be very grave.

There was a good deal of pain on either side of the hypogastrium, apparently due to tension of the muscles; this was temporarily relieved by the use of chloroform liniment. She had very little appetite, and I gave her a tonic composed of nux vomica and gentian.

The swelling continued to progress steadily, and on September 13th she presented the appearance of being at about the middle of the fifth month of gestation. The hypogastric pain troubled her greatly, and was only allayed for a very short time after each application of the liniment.

At the desire of the family, I now asked and obtained the advice of Dr. Ellwood Wilson, who saw her with me on September 15th.

In the forty-eight hours which had elapsed between my previous visit and this one, a very marked change had taken place. The abdomen had become greatly enlarged, its walls forming one curve from the ensiform cartilage to the pubes; there was very decided fluctuation, and percussion showed an area of dulness which was attributed by Dr. Wilson to the existence of a cystic tumor connected either with the Fallopian tube, or with the broad ligament. A sound was introduced into the uterus, the cavity of which was found to be unoccupied. Dr. Wilson advised the drawing off of the liquid, which was accordingly done by aspiration, on the 17th. More than a gallon of ropy yellow liquid, somewhat deeply tinged with blood, was thus removed; the flow then ceased, and the end of the canula encountered a solid substance, apparently a septum of considerable thickness. Upon the withdrawal of the instrument a fresh flow took place, the liquid spouting out from the orifice to a distance of several inches. When this subsided, the abdomen, which was much less tense, was covered with raw cotton, and a bandage carefully and firmly applied.

During the operation the patient became quite faint, but rallied after

the administration of a little brandy and water. In the evening her temperature rose to 103.5°, but before morning it fell to about 100°. She slept very little, and complained of much pain, due partly to the stiffening of the cotton and bandage by the agglutination of some of the liquid which oozed from the belly. On examining the wound in the morning, it was found closed.

The following evening the temperature again rose to 103.5°, but subsided again before morning, and was not thereafter above 99°. Yet her condition was unsatisfactory; her face was much pinched, and anxious; she had very little appetite or ability to take food; at times her mind wandered slightly, and she slept but little. Vomiting occurred frequently, and she was seldom free from nausea. Her bowels acted regularly; her urine was free, and normal in every respect. Her pulse varied, but was generally from 110 to 120.

Beef tea, milk, with brandy and limewater, and champagne, were given at as short intervals as the stomach could bear them, and at stated times. External warmth was carefully kept up.

It was determined that should symptoms of peritonitis present themselves, ovariotomy should be at once resorted to.

A portion of the liquid was submitted to Dr. H. F. Formad for examination, and his report, which was not received until some time after the case had terminated, was: "I think it very doubtful that it comes from an ovarian cyst, the fluid showing very little epithelium, and very few of the ovarian cells of Drysdale."

September 23, her condition was very much more favorable; her mind was composed and even cheerful, her pulse and temperature good. Some food had been taken and retained.

On the 24th her state was much the same, and it was thought proper to entertain the idea of an operation for the removal of the supposed ovarian tumor. In the afternoon Dr. Agnew saw her with Dr. Wilson and myself, and it was decided that the attempt should be made on the following day.

Accordingly, on the 25th, at noon, ether was administered by Dr. G. P. Sargent, of Bryn Mawr, and in the presence of Drs. Wilson and Agnew, I opened the abdomen by an incision in the median line. After dividing the wall I came to what seemed to be a cyst, and passed in an ovariotomy trocar, when a very free evacuation of liquid, straw-colored and ropy, but clear, took place. It was now apparent that the liquid was contained in the peritoneal cavity, and that there was a large solid mass lying among the intestines. This tumor was soft and doughy, like a placenta; it seemed to belong to the mesentery, since although somewhat movable, it was firmly attached to the posterior wall of the abdomen, rather high up. The surface of the mass having been slightly lacerated, there was somewhat free bleeding, which was checked with some

difficulty by ligation with carbolized catgut, and by the application of a cautery-iron.

The wound was now closed with two large pins and a ligature cast around them, and with metalic sutures; a sheet of raw cotton was applied over the whole belly, and secured by a bandage.

The patient rallied considerably, and after the effects of the ether had passed off, became quite sensible; but she soon began to sink, and died on the 27th, about forty-eight hours after the operation.

No autopsy could be obtained, so that the exact nature and connections of the tumor must remain a matter of conjecture.

The notable points in the case now detailed seem to me to be the occurrence of a solid tumor, probably of malignant character, and apparently connected with the mesentery, in a young woman recently married; its resemblance in its physical appearances to the pregnant womb; the very sudden change that took place by a fresh effusion into the peritoneal cavity, and the obscurity which even then existed as to the real nature of the case. Even with the most accurate diagnosis, effective treatment would have been out of the question, and I cannot but think that my suspicion of pregnancy, erroneous as it proved to be, really prolonged the patient's life, which would have been almost necessarily sacrified by earlier interference.

Society Reports.

ST. LOUIS OBSTETRICAL AND GYNECOLOGICAL SOCIETY.

Stated Meeting, October 18, 1883.

The President, T. L. PAPIN, M.D., in the Chair.

Geo. J. Engelmann, M. D., read the following paper:

EXTERNAL MANIPULATIONS IN OBSTETRIC PRACTICE.

Old and well known, familiar to many, as these methods are in obstetric practice, they have been, I may say, rather instinctively resorted to by the ignorant, than used, defined and developed by the scientific practitioner. Though at all times frequently resorted to, Credé was the first to call attention to one of these manipulations for one particular purpose, and elevate it to the rank of a scientific method. They are all valuable, and deserve greater attention and study than has heretofore been devoted to them on the part of the obstetrician. Universally used by primitive peoples, crudely practiced by many, highly esteemed by some of the most advanced obstetricians, they have not been sufficiently regarded to become a generally acknowledged, useful, scientific aid to practitioners.

External manipulations, especially massage and expression, are an aid to the abdominal muscles and uterine forces, and of great importance in the management of labor, as an aid in the same direction with that force so necessary to the normal expulsion of the fetus, the *vis a tergo*. Though appreciated and advocated by many leading obstetricians, they are not as yet the common property of every practitioner; they are valuable agents in the hands of every one, harmless if properly directed, and if more thoroughly understood and more frequently resorted to would, with the assistance of proper posture, accomplish all the objects for which ergot is given, and do away with any one indication for the use of that dangerous drug.

Massage and expression being the only resources in the hands of primitive peoples for the completion of difficult labor, they intuitively, by instinct and by long practice—not by scientific reasoning, of course—have brought them to a certain state of perfection, although brute force is more relied upon than dexterous manipulation. The methods are so simple, so natural, and so thoroughly in accordance with sound mechanical principles, that they have produced good results. Deprived of the brutality of physical force, and aided by science, these very means which have so long and so well served the ignorant will attain a high degree of perfection, and will serve far better the scientific obstetrician.

The physiological effects of massage are readily seen. The circulation is improved, absorption is furthered, pain is eased, the nerves are strengthened, the nervous system is quieted, and the physiological activity of the body increased without cost of fuel, muscular or nervous exertion, to the patient; there is a probability of greatly stimulated idio-muscular contractility, and it seems as if massage had an effect similar to electricity upon the muscles; the contractions thus aroused are a great factor in the process of absorption.

The importance of massage in obstetric practice is at once evident; it is a soothing, nerve-quieting influence allays the excitement of the patient, and the muscles are stimulated to increased activity. It serves a most excellent purpose in uterine inertia; whilst absolutely harmless, uterine activity is increased, the expression of the child hastened, and, after it is delivered, contraction and involution furthered; atony may be thus overcome and hemorrhage checked; but pressure upon the fundus, the direct *vis a tergo* expression, is, above all others, one of the most important factors in obstetric practice, and, by reason of its simplicity, within reach of every one.

1. The use of the hands for the rectification of position.
2. Massage.
3. Expression.

The rectification of position by external and combined manipulation is already well established in obstetric practice, and appreciated as a valuable

scientific method, so that I shall confine my remarks to the uses of massage and expression.

Let us consider *massage*, under which term may be comprised the various external manipulations practiced for the purpose of inducing uterine activity, friction, kneading and compression.

The use of friction with the palm of the hand, gently curved, upon the fundus of the uterine globe, for the purpose of exciting muscular activity, should be more frequently resorted to, both to stimulate labor pains and to correct those irregular, varying and painful, but ineffectual pains which so often accompany the first stage. With firm and steady but gentle pressure, the hand is passed over the abdominal walls, above the uterine body, following the circular fibres of the fundus. This, of course, is most useful before expulsion of the ovum, when the uterus is large and prominent, easily reached, though also of service in the third stage of labor, and even after expulsion of the placenta. The benefit is an evident one; as has been stated, it is quieting, soothing, especially under the conditions of nervous excitement caused by these irregular pains, and muscular contractility is stimulated; the effect may be compared to that of electricity. It is harmless, and we can thus at times correct those painful, ineffective efforts of the womb, or arouse and strengthen its healthy contraction.

Equally important is massage proper, the kneading or compressing of the uterine globe—not to be confounded with expression, the mechanical forcing out of the contents of the cavity. This is more like the kneading of other muscles in general massage, or shampooing, serviceable only when the size of the organ has been reduced, in the third stage of labor, after expulsion of the placenta, and in abortion. The fundus or sides of the womb are grasped antero-posteriorly between the ball of the thumb and fingers of one hand, and gently squeezed—compressed. This is not only a powerful excitor of uterine contractions, but also directly aids in expelling the contents of the cavity, and can, when necessary, readily be combined with *expression;* the latter is an equally important manipulation, which has played an important part in the history of midwifery of many of the primitive people through all time. It was their only hope; the only way in which they could force labor, in which they could express the unwilling fetus from the womb—a *vis a tergo* which was their only resort.

Primitive peoples have various uncouth methods of practicing expression, the best of which are, perhaps, the tightening of a belt, the leaning with the uterine fundus against a staff firmly planted in the ground, or lying flat upon the ground with a pillow under the abdomen. A very effective and simple method is by encircling the body with the arms and pressing upon the womb, with palms of the hands clasped above the uterine globe, when the patient is seated in the lap of an assistant, when she

is kneeling, squatting or standing, compressing the abdomen and pressing the womb down from above during each pain; a bandage passed around the body and tightened by assistants answers the same purpose as the encircling arms. An equally severe method adopted in retarded labor, and still advised in some of the modern works on obstetrics, is to have the ends of a towel or sheet, which is passed around the abdomen, crossed behind, each end being grasped by an assistant, whose duty it is to make firm traction upon the sheet, and especially to draw it tight as the abdomen diminishes in size, being careful to make traction in the intervals between the pains, lest the fetus during this time should resume the position it occupied previous to the occurrence of the pain.

Expression is most conveniently made, under the circumstances in which we usually find the parturient woman, by the physician seated or standing at the bedside—best standing—the palm of his hand laid over and gently clasping the uterine fundus, slowly compressing this and forcing it in the direction of the pelvis axis, an excellent method, which has of late become quite popular in one of the cases in which expression is of service, in the expression of the placenta, when the uterine globe has been greatly diminished in volume. In expression of the after-coming head in breech presentations, where it is an assistance of the utmost importance, where the manipulations of the accoucheur are greatly aided, and often ineffective without proper expression by the hands of an assistant, the practice is somewhat different. In this case, as well as in the expression of the body of the child, whenever the uterus is large in size, it should be made by the hands of the assistant standing or kneeling by the bedside, facing the patient's lower extremities, the palms of both hands upon the uterine fundus, the thumbs and the balls of the hands together upon its center, the fingers snugly encompassing the body and the sides. The line of pressure varies with the plane of the pelvis occupied by the part to be expressed, and should be made firmly during a pain or during the efforts at traction. It is a steady pressure in the direction of the pelvic axis, usually made either to aid the entry of the head into the inlet, straightening the oblique position of the womb and forcing the head to descend, or to assist the abdominal muscles during its expulsion; but, above all, to aid in the delivery of the shoulders and after-coming head.

Of these external manipulations, both massage and expression are valuable factors in the management of ordinary labor. Friction, to arouse labor pains and correct them if irregular, mitigate suffering and augment their force, especially in the first stage of labor, though useful also in the second or third. Massage, kneading and compression become of service as labor progresses, as friction is less applicable and the womb diminishes in size; to improve and strengthen, to stimulate the efforts of the uterine muscle, both during labor proper, the second and third stage, as well as after expulsion of the placenta to effect permanent contraction; the

latter being, perhaps, one of its most important objects. Expression is resorted to in aid of the abdominal muscles, indirectly of the uterine muscle. It heightens the effect of abdominal pressure; it fixes the uterine fundus, aids the muscular contractions, and keeps up the effect during their interval; it is of service in rectifying the obliquity of the womb, in directing the presenting part into the pelvic inlet, in forcing it through the outlet, but especially in the expulsion of the shoulders and after-coming head, and in delivery of the placenta.

DISCUSSION.

Dr. Gregory.—When I have a case of hemorrhage I put my hand into the uterus, and also press upon it; I always made it a point to press upon the globe of the uterus immediately after the birth of the child; and I not only press it, but I shampoo it, so as to be sure of getting a contraction. I was taught this by my preceptor more than forty years ago.

Dr. Engelmann.—I think we will find that though it is an old practice it is not a common practice by any means.

Dr. S. G. Moses.—I agree with Dr. Engelmann in regard to the rubbing of the uterus, the shampooing, and all that sort of thing; yet we do find cases in which shampooing, rubbing, etc., are insufficient; it does not produce the desired effect. There is no one who has practiced midwifery for any length of time that hasn't found cases in which the uterus had become perfectly inert; the membranes were ruptured, the presentation natural, but in spite of all the uterine rubbing and shampooing there were no further uterine efforts. When I first began practice, it was a very common habit to use ergot; and, of course, I was taught in such cases to try the effects of ergot, regarding always this particular injunction, that the ergot should never be used until after the membranes had ruptured, and never unless the presentation was perfectly natural, and the proportions between the pelvis and the child normal. Now we have all of us used ergot more or less; and I have yet to find a single case, in my practice. where I have used this drug, that it did any harm either to the child or the mother; and I have certainly often found it to restore uterine contractions when they had apparently entirely ceased, and where I wouldn't dare to empty the uterus hurriedly by the use of the forceps. I consider that it has been in my hands a very valuable oxytocic. I never go to a case of labor without ergot; not that I use it, of course, in all cases. Where it is necessary to hasten the birth of the child from any cause endangering the life of the mother or child, the forceps are to be used; but where there is inertia of the uterus, the uterus remains perfectly flaccid, and the child is arrested, not for want of proportion of the size of the head to the pelvis, but for want of a *vis a tergo*, I have used ergot with exceedingly beneficial results. So far for the use of ergot in the effort to expel the child.

I was led to use ergot to prevent after-pains by a case in which I was

obliged to use it, or at least I thought so, to produce active uterine contractions; and I found in that case, although the patient was not a primipara, she had had a good many children, that she had no after-pains whatever. At her previous accouchements she had suffered extremely; and in order to prevent these after-pains, and to produce a firm contraction of the uterus, I adopted the habit many years ago of using ergot after the head of the child had been expelled, or just upon the expulsion of the head of the child, and have yet to find the first case where the least injury has been done the patient. Except in the case of primiparæ, I always give ergot after the expulsion of the child's head or while it is passing through the vulva, and I have not only found that it is advantageous in preventing after-pains, but it produces uterine contraction with the expulsion of the child. I had a case, only a few days ago, of a lady who has one child; the uterine fibre was very relaxed, and the delivery very slow; the pains were effective enough, and the os was perfectly dilated, the head presenting. Finally the lady gave birth to a healthy child, and on the expulsion of the head I gave ergot, and as the uterus was very flaccid I repeated the dose in about fifteen or twenty minutes. The uterus contracted perfectly, and she had no after-pains.

Dr. Maughs.—This very old and universally known practice of shampooing, or massage, is often of very great assistance, and often is of little or no assistance at all. Nothing is better understood, in this country especially, than the use of ergot. Its maladministration is, I think, confined to widwives and the most obscure and ignorant of the profession; but the universal knowledge of the effect of ergot and the cases in which it should be used renders it scarcely necessary to discuss it. It is in all the text-books; and there is no possibility of anybody being mistaken about what the profession believes. There is no text-book that has been published within the last thirty or forty years—the last twenty-five years, I may say—but what has laid down explicitly the rules for the use of ergot. It is never to be given in a case where the retarding of labor is the result of obstruction, whether it be in the soft parts or the bony pelvis, from rigidity or any other cause. That is the universal law in midwifery. Like Dr. Moses, I always take ergot with me to a case of labor; I don't give it exactly at the time Dr. Moses does, unless there is some special indication. I always give a small dose of Squibb's fluid extract after the delivery of the placenta. I would give it before, if there was any special reason for it, as Dr. Moses would, but after the delivery of the placenta I would give a small dose to cause uterine contraction, and force the expulsion of any remnants of blood, for I believe that in many cases it prevents puerperal septicemia by ridding the uterus of clots; certainly it does, in many cases, relieve the after-pains by the firm contraction of the uterus and the prevention of the formation of clots, for the expulsion of which the after-pains are useful.

It should be given very cautiously during labor, if at all. You are invoking a force that you cannot control; and, if the child is not very speedily delivered, the woman may suffer from rupture of the uterus, and the child will certainly be destroyed, not from any toxic influence of the medicine, but by the contraction of the uterus, which is persistent and not intermittent. This contraction interrupts the circulation, and the child is destroyed, if not delivered very soon. Ergot should never be given by an inexperienced person, or in cases with which he is not perfectly familiar with the patient, knows from previous delivery that there is no mechanical obstruction to be overcome by the organ, but simply a want of uterine contraction. I had a case of this sort last year, in a patient whom I had delivered two or three years before in a very lingering labor, due to inertia. This was the second or third child. Her first labor had been protracted through inertia. I saw that it was necessary to give a dose of ergot; there was nothing else required, but simply to increase the uterine contraction, the *vis a tergo*. I gave ergot, and almost immediately the very next pain expelled the child. If we know from our knowledge of the patient and of the presentation and the condition of the parts that the only difficulty is inertia of the uterus, then in these cases it is proper to give ergot. I doubt very much whether it is ever necessary to give more than a ten or fifteen-grain dose to expedite delivery.

There are other equally effective oxytocics. Ten or fifteen-grain doses of quinine, freely repeated, increase the force and duration of the pains, and I am now in the habit in these cases where there is no obstruction, where formerly I would have given tentative doses of ergot, of giving quinine, and it has really a better effect on the patient. Then again I am not afraid to use the forceps in these cases. There is constantly an argument against the use of the forceps that it tends to the production of hemorrhage, because you deliver by a *vis a fronte*, and the uterus does not contract; any experienced accoucheur who has delivered with the forceps knows that the uterus contracts, and contracts suddenly, in nine cases out of ten. Another valuable effect of the forceps in these cases of lingering labor is this: not unfrequently the liquor amnii is penned up behind the head of the fetus, which comes down like a ball valve, fitting into the uterine os so completely as to prevent the escape of the water, and the introduction of the first blade of the forceps not infrequently causes a gush of water, and the uterus being emptied contracts upon the fetus, and it is thus stimulated to contraction by the application of the forceps. I don't know any physician who would risk the giving of ergot to a patient who had an obstruction of labor. In all the cases I have seen, it has been given by ignorant midwives or the more ignorant part of the profession.

Dr. Coles.—What has been your experience with Credé's method of expression of the placenta?

Dr. Maughs.—It is not Credé's at all; that is another misnomer. It is an old method, but Credé called general attention to it. I have been doing it all my life. I never extracted the placenta. I always express it.

D. McPheeters.—I believe with Dr. Engelmann that if external manipulation, embracing the various forms of it to which he alludes, was more thoroughly practiced, in nine cases out of ten it would overcome the uterine inertia during labor and obviate the necessity, or supposed necessity, for the use of ergot, which, as Dr. Maughs says, is not to be used in labor for the purpose of facilitating labor, except under very guarded circumstances; never in cases of obstruction, of course. I am in the habit of keeping my left hand on the globe of the uterus, during the pains, for the purpose of facilitating contraction and also for the purpose of securing and maintaining the progress made by a pain, and frequently, when it is necessary, of kneading and massaging; after the head of the child has been expelled, and even after the placenta has been expelled, I never release my grasp on the uterus, but by compression and by massage I seek to facilitate and augment the uterine contractions so as to prevent hemorrhage and facilitate the expulsion of the placenta. Like Dr. Moses and Dr. Maughs, I make it a rule to have ergot with me. Recently I had a case in which there was no ergot used. I failed to take it with me, and it was at a distant place; and I had a fearful hemorrhage in that case. Of course the external manipulation and cold applications tended to counteract the hemorrhage; but the bleeding was fearful, the woman became pulseless, and I was afraid she would die; but by the vigorous external manipulation before the ergot arrived, the crisis was passed and the uterus contracted.

I always prescribe chloroform and ergot, and aim to have them in the house before the labor begins. I seldom give ergot prior to the birth of the child; but it is my rule to give it afterwards, for the double purpose of facilitating the expulsion of the placenta and of securing contraction of the uterus and preventing post partum hemorrhage. I look upon it as a very valuable remedy in its place, and I cannot agree with Dr. Engelmann that it is a dangerous drug when in the hands of competent persons. I don't recollect in forty years practice ever seeing any injurious effects to either mother or child from the use of ergot.

Dr. Maughs.—I have seen half a dozen cases of rupture of the uterus.

Dr. Gregory.—I would like to ask Dr. Maughs if he has seen many cases of rupture of the uterus where ergot was not used.

Dr. Maughs.—I have not; I believe I have never seen but one case, and that was where an effort was made to turn the child while there was a spasmodic contraction.

Dr. McPheeters.—I wish to supplement my remark by saying that I

consider the use of ergot very valuable in the relief of after-pains. I remember a case in which the after-pains were very severe and run along for ten days or two weeks. We couldn't check the pains at all. She had been delivered three or four times, and in each instance the after-pains were of the most appalling character. I succeeded in relieving her the last time by the use of ergot and quinine—not such heroic doses as Dr. Maughs gives. I give it for its anti-periodic effect, and accompany it with ergot for the purpose of bringing about contraction. I think very often these after-pains can be relieved by quinine and ergot better than by anodynes.

Dr. Maughs.—I give the quinine in a different condition. I give it during labor.

Dr. Papin.—Some years ago, during the war, I recollect attending the case of a lady who had given birth to a number of children; following the delivery of each child there was retention of urine, a spasmodic contraction of the neck of the bladder, so that the water had to be drawn for six, seven or eight days. With the intention of hastening the contraction of the uterus I gave her a dose of ergot and followed it immediately after the birth of the child with a second dose, and strange to say she had no trouble in that case with retention of urine. All her other labors had been followed by this retention. I attended her two years afterwards in another labor, and did not use ergot; and for eight days I was obliged to draw her water. Some two or three years after this I met her in Philadelphia, and she told me that she had another child in Philadelphia, but remembering the effect of ergot upon her bladder at the time I delivered her, she urged upon the physician the necessity of its use and related the circumstances to him. He gave her ergot and she had no trouble with the bladder afterwards.

Dr. Goles.—While I think we all heartily agree in regard to the time-honored principles that the gentlemen have laid down in regard to the use of ergot, the paper of Dr. Engelmann is interesting, inasmuch as he has paid some attention to the art of obstetrics as it is practiced among primitive people—among savage nations. I believe that all external manipulations, such as compression, massage, etc., in order to prove an effectual aid to labor, and at the same time insure the safety of the mother and child, must be practiced on strictly physiological principles. In other words, the manipulation must not be too rough or powerful; they must not be sufficient to bruise the soft parts, otherwise we may incur great danger to the female. Dr. Engelmann makes use of one remark, if I understand correctly, which surprised me. He spoke of the external manipulations which are almost universally practiced among savage nations, and said that accidents and death were comparatively rare under such circumstances. Now I am very much disposed to doubt that. I doubt whether we have any reliable statistics on that subject.

We know from our own experiencce in the practice of midwifery that it is comparatively rarely that we meet with cases of fatal obstruction in labor; that is to say of malpresentation and other obstructions, such as would render the use of the forceps or some manual interference absolutely necessary. We know that the women of savage nations, on account of their nomadic habits and the strong and muscular build, generally go through ordinary labor with greater facility than those in civilized life; but when you have a labor arrested by malposition, deformed pelvis, or anything of that sort, I should think that the brute force which is resorted to in such cases among savage nations would be more favorable to the bringing about of fatal results than the practice among civilized people. I imagine most of the statistics that we have on such matters come from military posts, from surgeons and missionaries who have had opportunity of examining into the details of comparatively few labors, and, it may be, that although we very seldom hear of deaths among Indians and other savage people, yet, when we come down to the bottom of the matter, we will find that there is a heavier mortality in cases of obstructed labors among savages than is generally supposed. It is reasonable to suppose so, I think, from the fact of their unfamiliarity with the use of forceps, which, as we know, are sometimes absolutely essential; that they are ignorant of the methods of performing version, craniotomy, laparotomy, etc. The methods they pursue of expression, and other external manipulations, and which are their only resort, are in many cases so unskillful and brutal that I imagine when full and reliable statistics are secured, and we come to analyze them, it will be found that such procedures in their hands are exceedingly unscientific and hurtful.

I believe, so far as the use of ergot is concerned, that when it is thoroughly understood when, and under what circumstances to use it, it must continue to hold a prominent place in obstetrics, while massage and compression will also prove of great service, and that when judiciously employed, such methods will to a certain extent supersede the use of ergot in labor.

Dr. Papin.—My personal experience is that nearly all the difficult labors have been among muscular women.

Dr. G. A. Moses.—I think the paper of Dr. Engelmann, directing attention particularly to external manipulations as taking the place of medication, whether by ergot or other agents, for the purpose of expediting labor, is very well and useful. But if the paper is published without any objection, will we not be sending out the impression that massage, kneading and external manipulations of the uterus during the act of labor, in the first stage or afterwards are perfectly safe, whereas, they are quite as dangerous. We run almost as much risk of encouraging men to do damage by it as would be done by the intelligent use of a

drug. I have read of a case in which an attendant attempted to bring about contraction of the post partum uterus by manipulations where the organ was flaccid, and hemorrhage occurring, manipulations were instituted in such manner as to compress the uterus irregularly, resulting in one of the most serious accidents—inversion—that we can have as a consequence of labor. I think it is proper that we should keep in mind the possible dangers of this extremely useful measure, at the same time condemn the reckless use of ergot or other drugs. Whether it be in finding a new application for an old remedy or a new practice entirely, we must be careful that in condemning one remedy we do not run to the other extreme and incur the liability of encouraging those who are not apt or experienced to the use of a measure, feeling that it is perfectly safe, whereas it is only safe in the hands of the skillful.

It has only been lately that the question of antiseptics in midwifery has been largely discussed and their necessity urged, the vagina and uterus being washed with some antiseptic lotion immediatly after labor. I regard this as extremely dangerous practice. In a recent discussion before the British Medical Society, experience proved that the danger which attends these injections overbalances any benefit that can be derived from their routine use.

Dr. Ford.—I have followed the old, well-established practice of using gentle friction of the uterine globe during labor when it seemed to be necessary, avoiding anything like force or injurious prolongation of such manipulations or frictions; and, of course, it has been my practice for a great many years to deliver the placenta by expression. It has been a long time since I pulled upon the cord. I think Dr. Engelmann has done well to call attention to this method, but I think the profession has been using it a long time; and I honestly do not think anything can supplant the use of ergot in appropriate cases. I think that we are obliged to use ergot in some cases, and for my own part, when I am called to a case of labor, I always carry it with me. I think myself that it is decidedly inadmissible to give ergot when there is any obstruction; and that before the introduction of the forceps is attempted, the os uteri should be dilated or easily dilatable. We should not use ergot until the placenta is expelled, except in very special cases. I think that is decidedly the safer plan. I always give it immediately after labor for the purpose of keeping up the contraction of the uterus, which sometimes fails, and, of course, to prevent after-pains. The use of ergot just before the child or placenta is expelled is apt to produce tonic and irregular contractions. Some time ago I was called upon to see a lady who had been in labor for about three hours, and the attendant had given ergot freely before delivery; the child had been born for some two hours, but the placenta was closely grasped by the uterus. It was impossible to pass the hand between the uterus and placenta—about one-third of the pla-

centa presented in the upper portion of the vagina. I endeavored to pass my fingers between the placenta and the uterus grasping it, but could not do it, and I determined to use ergot: we gave a teaspoonful of the fluid extract, and after waiting just twenty minutes, a few whiffs of chloroform, and I succeeded in passing my hand in and withdrawing the placenta, which was not adherent, as the attendant supposed. A very considerable quantity of imprisoned blood and clots followed. As the effect of the chloroform passed off the uterus contracted and she had no after-pains. I am satisfied that by the use of ergot before the placenta is expelled irregular spasms of the uterus may be induced. It is not a good practice.

Dr. Coles.—What was the difficulty in delivering the placenta when you first got there?

Dr. Ford.—There was a so-called hour-glass contraction, brought about by the premature administration of ergot, in my opinion. This case furnishes, I think, a very good illustration of the powerful and true antagonism between ergot and chloroform.

Dr. Yarnall.—I would consider myself as thoroughly unarmed without ergot as without forceps in obstetrical cases. I thoroughly endorse the remarks of Dr. Moses. He expresses my ideas very perfectly. Sometimes in the early stages of labor I am induced to give ergot when contractions are sluggish; and in the last period of the second stage of labor, when I use ergot, I usually unroll my forceps so that if the ergot does not accomplish the purpose I can deliver very quickly. There is no question about the fact that the after-pains are very much less after the use of ergot than when it is not given. Ergot sometimes acts as an emetic. This is not objectionable. "A sick labor is a quick labor."

In relation to the use of compression, I will say that some years ago a gentleman from the interior of this state wrote a paper which was read before one of the medical societies, and he afterwards visited St. Louis. He was very enthusiastic on the subject, and asked me to institute a series of experiments in St. Mary's Infirmary, and with the assistance of some of the students I did endeavor to put the idea into practice, and I must say that in the first stage of labor compression accomplished no good whatever. There is no question but what in the second stage it will oftentimes accomplish a great deal of good. I recollect in a case of a very thin, cadaverous woman with a very large pelvis, that I absolutely pressed the child out of the uterus. I delivered her by expression. There was almost complete inertia of the uterus in that case. I found, however, that in the majority of cases expression in the early periods of the second stage did no good. Sometimes I use manipulation to try to establish pains, but I have found that very little good can be done in cases of muscular and fleshy women. I believe there are some cases in which you can almost force the child through, but they are very rare.

Dr. Barrett.—I must say that I have to differ with Dr. Moses, Maughs and Yarnall in regard to the use of ergot. I don't believe that there are any cases—no, I won't say that there is no case—but I believe that the practice of resorting to the use of ergot before the child is delivered is never a safe one; I do not believe it is ever good practice. In the case related by Dr. Maughs, in which he knew the patient, and knew that she had been delivered several times successfully; in which there was no obstruction; in which the pelvis was amply large, it may be very well; that is all very well so far as it goes; but how is he going to determine the size of the child's head; the degree to which ossification has gone; as to whether there is any malformation of the child. If he gave ergot in that case and an injury was inflicted I think he could hardly be held blameless. The doctor will doubtless say he gives the ergot very carefully; and that there is no danger of producing ergotic contraction of the uterus—tetanic contraction of the uterus—and I have no doubt the doctor gives it carefully, and with good judgment, but I think it is difficult to say how much ergot can be given with safety in a given case. We know that remedies act differently in different individuals, and that doses which are perfectly safe in one subject would be unsafe in another; in other words, we cannot tell what effect the ergot is going to have, and for this reason ergot is never safe in any case before the child is delivered; moreover, I don't believe it is ever necessary in those cases, stated by the gentlemen, in which there is uterine inertia, want of contractility of the uterus, to give ergot. A little rest on the part of the patient would enable her to summon up enough force to restore the uterine contractions, and permit the labor to go on without difficulty. The uterus ceases to contract simply because it is worn out, and it seems to me that the rational course is to let the uterus rest. I think the better practice would be to give the patient a dose of opium and let her go to sleep, and I certainly think it is safer than giving ergot.

Dr. S. G. Moses.—I made this proviso: that the membranes should be ruptured, the os perfectly dilated, and that there should be no impediment detected, and that the presentation should be natural. If you waited any length of time after the membranes had been ruptured—say three or four hours, you would probably lose the child.

Dr. Barrett.—In the case you instance there would be no danger to the child so long as the uterus remained inactive. When it began to contract it would be much better to have the contractions set up in the normal, physiological way.

Dr. S. G. Moses.—How long would you wait?

Dr. Barret.—Until the uterine contractions returned; until I deemed it necessary to resort to the use of the forceps.

Dr. S. G. Moses.—There is one single case that I wish to relate as it was very instructive to me. I attended a woman in 1848 who had borne

a number of children, although I had not attended her in any previous labor, and had always flooded intensely; indeed, at the last labor the flooding was so immense that she came very near dying. When I was called to this case, prepared as I was by the history of her previous labors, I was very caution in the treatment of the labor. Her children were all normal; the presentations natural. I put a bandage around the body so that I could compress the uterus, and ruptured the membranes as soon as the os was dilated and the presentation ascertained, and gave a dose of ergot, and as soon as the pains came on the child was delivered without any trouble; she never flooded, and made a first rate recovery. This is an isolated case, but it is a case in point.

Dr. Barret—The degree of ossification of the child's head is always an important factor in labor, as is proved by the fact that a woman will have an easy labor at one time and at another time have a labor in which it is absolutely necessary to resort to assistance to enable the delivery to be completed in cases where the pelvis is normal. I agree with Dr. Engelmann, also, in the belief that ergot is very much abused. I use ergot a great deal less than I did some years ago. I think ergot is a very depressing remedy. I think it is very lavishly and ignorantly resorted to for the purpose of producing contraction of the uterus.

Dr. Maughs.—Not by intelligent physicians of the present day.

Dr. Barret.—I don't mean that it is mal-administered; that it is given in opposition to the rules which are laid down. I think for the purpose of controlling post partum hemorrhage, if the uterus is empty of fetus and placenta, ergot may be of great value in controlling the hemorrhage, by producing contraction through the nervous centers. That is the only way in which we can produce contraction—by stimulating the nervous centers and stimulating the uterus in that way. I think it is apt to be abused when it is given before the child is delivered.

Dr. Maughs.—You and I differ so little that it would be difficult to define the line.

Dr. Barret.—I am satisfied that you never give ergot wrongfully, nor do I think Dr. Moses does, but when you promulgate the idea that it is perfectly safe to give ergot before the child is delivered, you are giving forth the idea that it would not be safe to teach some members of the profession who may not be able to discriminate between the cases in which it may and those in which it may not be used; you may be misinterpreted. I think with reference to the subject that Dr. Engelmann has brought up, that of expression – that it is a valuable means, and one, perhaps, that is too much neglected.

Dr. Gregory.—I would like to ask Dr. Yarnall whether the case he was so successful in delivering by expression was among the first cases or the last upon which he tried that method?

Dr. Yárnall.—Among the first.

Dr. Engelmann.—I am very much obliged to Dr. Barret, who seems to express exactly the thoughts I intended to express, but perhaps did not. I certainly did not think that I was bringing forward anything new. They are old practices, very old and well known, and the proper use of ergot is also well known; but at the same time I think that at present there are among the leading obstetricians those who do not consider that ergot is either so necessary, or perhaps so harmless, as has generally been supposed, and who never use it in their labors at all. I would only differ with Dr. Maughs in regard to this: He seems to think that this is all well understood. It is well understood by the gentlemen here, and if they choose to use ergot, thoroughly knowing their patients, and knowing all the conditions, they may use it, still I do not think they should permit that to go forth as a generally allowable use. I do not think that the use of ergot is quite so thoroughly understood as Dr. Maughs thinks. He says he has seen no case of rupture of the uterus where ergot was not used, but that he has seen six, and I have seen two within the last year that were caused by the use of ergot, and I think that the majority of these cases of rupture are cases where ergot is given; and I think that this goes to show that the use of ergot is not quite so thoroughly understood as some suppose. To be sure it is most among midwives that it is misused, but I believe a great many physicians look upon it as their one help in labor; and the text-books are not so strict in stating that ergot should not be given until after the expulsion of the placenta except in isolated cases. That is not laid down in the text-books, and I think physicians stretch the limit for the use of it, and give it just as the head is being expelled or before the expulsion; and I think they go furthur and further back. Certainly when we know how many cases of rupture of the uterus are caused by the use of ergot, I think we may safely assume that a great many minor injuries are caused to the soft parts, the cervix, perineum and so on of the mother, or injuries to the child. We do not know, of course, how many of those injuries are caused by this drug, but it seems to me that, as Dr. Barret states, ergot is an unsafe remedy at any time before the complete emptying of the uterus. It may be given by a physician who thoroughly understands its action and is familiar with the patient; but even then, as Dr. Barret suggests, he cannot know the size of the child's head, or possible malformation. Then it is not necessary to resort to it, as we have other remedies, such as the forceps, external manipulations and the expression of the child, and the stimulating of the uterus to activity by the use of quinine, friction or massage. Certainly midwives and a great many practitioners believe that ergot is necessary in labor. In regard to the question of Dr. Coles as to the statistics which I have gathered, I will say that I have the statements of physicians and missionaries who have lived for ten or fifteen years in

the communities, and who have heard only of the serious cases of labor. I have the statement of a great many such, and they have not known of a death in labor. I think it is a rule that the nearer the animal the easier the labor, as where a tribe is pure those accidents are not known; that is, where the father and mother are of the same tribe; where there is no mixture of tribes, the formation of the child's head is adapted to the shape of the maternal pelvis, and no trouble occurs. But where there is a mixture of tribes, where whites mix with the natives, there we find that there are fatal labors. That is the statement that I have received from all points.—*St. Louis Courier of Medicine.*

TRANSACTIONS OF THE OBSTETRICAL SOCIETY OF PHILADELPHIA.

Stated Meeting, Thursday, January 3d, 1883.

The President, R. A. CLEEMANN, M.D., in the Chair.

BATTEY'S OPERATION.

Dr. E. E. Montgomery corrected a statement made in the report of the case of ovariotomy narrated by him at the meeting of December 6th, 1883. *Silk ligatures*, not catgut, were used to tie the pedicles.

The convalescence of the patient had been very satisfactory. The temperature did not rise above 99° F. In performing this operation no antiseptic was used, all instruments, sponges, etc., were washed in boiling water and boiled water was used in washing the wound and abdominal cavity. The mental condition of the patient was such that she was kept constantly under mechanical restraint, and on one occasion, when she had been left alone for a few minutes, she tore all the dressings off of the wound and at the next visit it was found bare, but no bad result followed. The sutures were removed on the eighth day. Some pain in the lower part of the abdomen and slight fever commenced on the twenty-fifth day, but she has since again improved. Her mental condition is at present better than it had been for a year before the operation and she can now converse rationally.

SEPTICEMIA AFTER ABORTION.

Dr. W. H. Parrish reported the following case: A young woman, twenty years of age, came into the Philadelphia Hospital in the finishing stages of an abortion, which had been coming on for some days. The cause was unknown but was probably instrumental. At the time I first saw her, three days after her admission, her temperature was 103° to 104° F., and pulse 150. She had had a chill before admission, her abdomen was distended and tender and the uterus was very sensitive. The right parotid gland was swelled and painful. It continued to enlarge, and, fearing septicemia, he gave fifty grains of quinine daily by rectum, as the stomach was too irritable to retain it; one ounce of

whisky was given by the mouth every hour, day and night. A small quantity of morphia was given to relieve the abdominal tenderness. The pulse and temperature fell rapidly, but the gland continued to be swelled and painful, it was quite hard but not discolored. There were no chills now but fearing the presence of pus, he made an opening by Hilton's method, incising the skin and using a director to tear an opening through the gland tissue, this opening was enlarged by passing a pair of forceps, closed, along the groove of the director and withdrawing them opened. This opening gave exit to two or three fluid drachms of pus. The gland now improved in appearance, but another abscess opened behind the gland and discharged freely. The two abscesses did not communicate. The patient is now convalescent.

OFFICERS OE THE SOCIETY FOR 1884.

President—Richard A. Cleemann, M.D.

Vice-Presidents—B. F. Baer, M.D., W. T. Taylor, M.D.

Secretary—W. H. H. Githens, M.D.

Treasurer—Alfred Whalen, M.D.

Librarian and Curator—T. Hewson Bradford, M.D.

Councillors—Drs. R. P. Harris, Lewis D. Harlow, Wm. Goodell and T. M. Drysdale.

Publication Committee—Drs. John H. Packard, James V. Ingham, Elliott Richardson and B. F. Baer.

EDINBURGH OBSTETRICAL SOCIETY.

Meeting of December 12th, 1883.

DR. ANGUS MACDONALD in the Chair.

EXHIBITION OF SPECIMENS.

Dr. Angus Macdonald showed:

1. Ovary with tube, from a case of salpingo-oöphorectomy.

2. Fibroid tumor from a case of hysterectomy.

3. Slough produced after Sims' operation for removal of carcinoma of cervix. All the cases from whom the specimens were obtained have recovered.

Prof. Simpson showed:

1. Placentæ and membranes from a case of triplets, sent by Dr. A. T. Sloan, Penrith.

2. Anen-cephalic fetus, sent by Dr. Henry Barnes, Carlisle.

Dr. Webster described a knot on the umbilical cord of a new-born infant.

Dr. Angus Macdonald then read

THE HISTORY OF TWO CASES OF EXTRA-UTERINE PREGNANCY, in one of which the operation of laparotomy and intestinal resection was performed with the most gratifying results.

CASE I. Mrs. S., married, æt. 28, was admitted to the Royal Infirmary in May of the present year, complaining of abdominal distension, pain, and œdema of the left leg, and great exhaustion. She menstruated regularly till October, 1882, when menstruation stopped. Shortly after she complained of great pain in the abdomen, for which she took some medicine, which relieved her. In December she was troubled with vomiting and sickness in the morning, which lasted four weeks, when they ceased. She states that she distinctly felt fetal movements until a month ago. In February her breasts contained milk. Four weeks before admission she was working very hard at home, and thinks that she over-strained herself when she had pain and noticed her abdomen beginning to swell. Her family and previous history were good. From date of admission to June 12th a varying amount of pus and blood was seen in her motions. July 5th. Abdomen flaccid and much smaller than before. No pain is felt on pressure. The uterus can be felt above the pubis. A tumor is felt *per vaginam* behind and to the right of the uterus; its surface is very irregular, and is found to extend above the brim of the pelvis on the left, as well as on the right. The sound enters the uterus about five inches. Through the rectum the tumor is felt, especially on the right side, pressing on the surface of the rectum. On September 5th the general condition of the patient had improved, yet there was very marked exacerbation of pain after each attempt at motion. That condition of the patient was such that Dr. Macdonald felt that he could no longer leave the patient without doing something for her. He therefore determined to operate, and on Oct. 9th, 1883, assisted by Drs. Chapman, Dunlap, and Playfair, he opened the abdomen, with antiseptic precautions, omitting the spray. The peritoneum was reached without difficulty. It was then found that the remains of the fetus were attached to the right and posterior aspects of the abdominal wall. What appeared to be an abdominal adhesion of the cyst was torn asunder, and the bones of the skull and other bones removed. When the apparent cyst was drawn forward from the wound, it was found to consist of about five or six inches of the small intestines, the walls of which where they lay in relation to the abdominal wall, were thick, softened, and almost gangrenous. In the cavity in which the fetal bones lay there was a considerable amount of fecal matter. A loop of intestine, which was adherent to the part above mentioned, was carefully separated from the rest, and was found to contain a fecal fistula also. The whole of the rest of the contents of the cavity where the fetus lay were now completely removed, and the cavity sponged out. The portion of the intestine already mentioned, whose wall formed part of the cyst, was now cut out, and the healthy ends of the bowel brought together as completely as possible by a continuous catgut suture, care being taken to approximate the raw edges completely without including any of the mucous mem-

branes. The stitches were passed very close to one another, and this part of the operation took up considerable time. The gap in the mesentery was also brought together by continuous suture. During the operation there was some hemorrhage, completely arrested, however, by the sutures. The edges of fecal fistula above referred to having been thoroughly rawed, were carefully brought together by catgut suture. The abdomen was now sponged dry, and the wound closed, a large India-rubber drainage-tube being introduced at the lower angle of the wound, so as to extend to the bottom of the cyst. The patient recovered from the shock of the operation. From the 12th of October to the 22d of October, fourteen days after the operation, the patient continued gradually to improve, and has continued to do so till the present time, when the wound is entirely healed. There is neither abdominal distension, nor abdominal dulness in any part. The abdomen, when percussed over the seat of the fetal sac, gives a perfectly resonant note. The bowels have gradually improved in their action, and are now perfectly regular and opened only once daily. It may be stated that for some time during her stay in the hospital she was much troubled with diarrhœa. The patient is putting on flesh and is getting up daily. She walks easily, and feels to be gaining strength. I examined her, said Dr, Macdonald, *per vaginam* this afternoon, and I now find that all pelvic thickening is completely gone. The uterus natural in size, and quite movable, and not a trace of any deposit or tenderness can be felt.

After some explanatory remarks on the case, Dr. Macdonald gave the record of another case, which, though containing many points of interest, did not call for the same amount of attention.

DISCUSSION.

Dr. Underhill congratulated Dr. Macdonald on the value of his paper and the success of so important an operation.

Prof. Simpson expressed some difficulty in opening the discussion on so large a subject. He held that many of the cases of hematocele were due to an extra-uterine sac bursting. The diagnosis does not influence our methods of treatment, the first object being to restrain the existing hemorrhage—ice bags to treat immediate symptoms. The proof of our diagnosis was in many cases, wanting owing to the early condition of the embryo, and it was only when development has gone further that the other complications show the nature of the cause of the first symptoms. Dr. Simpson further referred to other causes in forming a diagnosis, and he held that the treatment of Dr. Macdonald should be undertaken with considerable caution.

Dr. Hart made some remarks commendatory to Dr. Macdonald's skilful treatment.

Dr. David Smart related the history of a case of extra-uterine fœtation that had come under his notice.

Dr. Wilson related the history of two fatal cases, a preparation of which he hoped to place before the Society.

Dr. P. Young feared for the future of Dr. Macdonald's case, he feared that there might ultimately be constriction of the bowel, and he related a case where constriction of the bowels had followed a wound in the gut with apparent recovery, but ultimately constriction came on followed by death.

Dr. Napier also made some remarks.

Dr. Macdonald also made a few remarks after which a very full and interesting meeting closed.—*Medical Press.*

OBSTETRICAL SOCIETY OF LONDON.

Meeting of Wednesday, October 3, 1883.

H. Gervis, M.D., President, in the Chair.

Ruptured Ovarian Cyst.

Dr. W. A. Duncan also showed a multilocular ovarian tumor, one of the cysts of which had ruptured during an ordinary examination, leading to fatal peritonitis. A committee was appointed to examine and report upon the specimen.

Arrested Development of One Fœtus of Twins.

Dr. Edis exhibited a specimen of this kind. One fœtus was born alive in the seventh month of pregnancy; the other, expelled seven hours before it, was shrivelled and its placenta atrophied, apparently having died *in utero* about two months previously. Dr. Edis also showed twin fœtuses at about the fifth month of development.

Dr. Malins had seen a case in which one fœtus had been born living at the eighth month, the growth of the other, expelled at the same time, having been arrested at the fourth month. Cruveilhier had illustrated the same condition. Such cases showed the power of toleration possessed by the uterus, and were also interesting in their medico-legal aspect.

Placenta Succenturiata.

Dr. Champneys showed a placenta succenturiata. It was impossible, from an examination of the afterbirth, to diagnose the retention *in utero* of such a body.

Dr. Daly said these cases were of medico-legal interest. He had been called to a case in which a woman died from hemorrhage, caused by a piece of placenta left *in utero*. An unqualified practitioner had attended the case, and at the coroner's inquest pleaded that the retained piece was a supernumerary placenta, a view which was accepted by the jury.

Gangrene During Pregnancy.

Dr. Swayne related a case of gangrene during the seventh month of pregnancy. The disease came on after a long journey, and attacked the integuments and muscles over a space the size of a man's fist on the upper

and inner third of the right thigh. The symptoms had existed about four days before the occurrence of premature labor, but were not very severe until after delivery, when they became much intensified, and proved fatal early on the third day. There was no injury, wound, or erysipelatous inflammation to account for the occurrence.

Dr. Burchell said that, although the case was not clear, he could not help believing it to have been one of strangulated femoral hernia.

Dr Herman asked if the case were not one of gangrenous carbuncular inflammation.

Dr. Swayne thought the most probable explanation was, that the gangrene was due to undue pressure on the iliac vessels, possibly from tight lacing, to which the patient was accustomed. The situation of the tumor precluded the idea of strangulated hernia; the vesication and absence of any head that of malignant carbuncle; and the absence of diffused redness at the onset that of erysipelas.

On the Anatomy, Physiology, and Pathology of the Os Uteri Internum.

This paper, by *Dr. Henry Bennett*, was read. The author had, in 1849, drawn attention to the existence of a muscular sphincter at the os uteri internum; and this, like all sphincters, was closed when at rest. This fact was accepted by many at the time, but now seemed to have passed out of mind. It had a most important bearing on uterine therapeutics. The ordinary physiological closed state of this sphincter offered resistance to the passage of the metallic sound, but a small wax bougie could be passed through it. By the use of such bougies he had, in 1846, discovered that the cavity of the uterus was not straight, but had an anterior concavity. This sphincter was, no doubt, greatly developed by pregnancy. It opened slightly before, during, and after menstruation, and probably during sexual congress. It was relaxed by disease, such as fibroids, chronic uterine inflammation, endometritis. The easy passage of the sound was, therefore, an indication of a morbid rather than of a healthy condition of the uterus. This fact had an important bearing on the theory and treatment of sterility. If a closed os uteri were presumed to be a morbid condition, then nearly all healthy young women who were examined would be erroneously considered to require surgical treatment.

Dr. Galabin had no doubt of the existence of a sphincter at the os internum. This was shown by the constriction often seen at this point in a laminaria tent, and by the rapid contraction of the os after dilatation. But he could not agree with Dr. Bennet that it was normally completely closed. Where the passage of the ordinary sound was resisted, a smaller one, without a bulbous end, would often pass, if the direction of the canal were hit upon, although a hitch was sometimes caused by flexion of the canal. He thought further evidence was much to be desired as to the cure of sterility by incision or dilatation of the cervix. His impression

was that he had seen a larger proportion of pregnancies follow dilatation by bougies than incision. He thought it would be of great value if some of those who performed the operation would give the number of pregnancies following in a complete series of consecutive cases. The only such series he remembered did not show a greater number than might be accounted for by coincidence.

The President remarked on the interest and value of Dr. Bennet's paper. In former years he (the President) had rarely incised the os internum. But lately, where there was evident constriction (a fact of which he had no doubt), he had done so, and his results had been distinctly better. Where the os internum was fairly patulous, and the constriction affected the os externum alone, he was satisfied with its division.

Dr. Heywood Smith protested against the use of the scissors to divide the os externum, for too extensive an incision was thus made, and the power of imbibition possessed by the external os destroyed. The most scientific method of doing the operation was with Sims' narrow-bladed knife.

Dr. Playfair believed very little in stenosis of the os internum, and not at all in its incision for the cure of sterility. Incision of the os externum, in well selected cases, was occasionally followed by pregnancy; but he believed it was done far too often, and too indiscriminately. He believed it acted, not only by enlarging the os, but by remedying the conical condition of the cervix, which was, more often than stenosis, the cause of sterility.

Dr. Champneys pointed out that difficulty in the passage of the sound was not proof of stenosis of the os internum. Difficulty might arise, even when the canal was larger than usual, from the instrument being passed in the wrong axis, or from its point catching in a fold of mucous membrane. It was only when the bulb of the sound was gripped, during withdrawal, that stenosis could be inferred.

Dr. Aveling was sure that contraction of the os internum was a cause of dysmenorrhœa and sterility, and believed that incision gave more permanent relief than dilatation. After incision he did not use a stem-pessary, but passed the sound daily for a week, and then less often, till healing had taken place.

Dr. Edis thought there were instances in which division of the internal as well as the external os was needed. Each case must be treated on its own merits, it being impossible to lay down any general rule. After incision, he used a stem-pessary, the patient being carefully watched.

Dr. Murray thought division of the os uteri for sterility alone of doubtful utility. He had seen many cases in which it had been done without good results. It was not free from risk to life, and ought not to be done simply at the request of the patient.

Dr. Henry Bennet gathered that his views were generally accepted,

although some might not go as far as he did. Deep division of the cervix had been formerly, and he believed was still, too frequently performed by some practitioners. The abuse of surgical treatment might be on the wane in England, but certainly was not elsewhere. It was therefore desirable to establish the anatomy, physiology, and pathology of the os internum on a sound basis. Other waves of opinion were setting in, equally exaggerated in their character, as for instance, in America, the unjustifiable sewing up of the lacerated cervix uteri for insignificant lesions easily cured by the simplest local treatment, and, with us, the abuse of pessaries.—*British Medical Journal.*

Abstracts and Selections.

I.—OBSTETRIC.

Conception during Amenorrhœa.—Dr. André Petit (*Annales de Gynecologie*) after detailing carefully some twenty-four cases, arrives at the following conclusions:

1st. If, in the adult woman of normal constitution, there is no menstrual discharge in the absence of the ovaries or of the physiological action of these organs, ovulation, on the contrary, can take place in certain cases without the discharge of blood which is the external phenomenon of menstruation.

2d. The cases cited do not furnish an argument in favor of the theory of disjunction between ovulation and menstruation. The latter, normally dependent upon ovulation, may sometimes be at fault, when there exists in the woman a local or general cause, which makes it impossible for the uterus to furnish the elements of a hemorrhage under the exciting influence of the ovary.

3d. Amenorrhœa under these circumstances is not an indication of sterility. There exists a large number of cases of pregnancy occurring during amenorrhœa.

4th. The physician should seek with the greatest care the cause of the amenorrhœa, to be able to declare understandingly regarding the aptitude for marriage and fecundation of young girls suffering from this affection.—*Medical Progress.*

Labor Complicated by Carcinomatous Stenosis of the Cervix Uteri. High Amputation of the Cervix, after Version by Braxton Hick's Method, and Extraction of the Fetus.—*Vienna General Hospital. Service of Prof. Carl Braun.*

The case about to be reported deserves especial attention, as illustrative of a doctrine, growing in favor among modern German obstetricians.

The patient, thirty years old, unmarried, native of Austria, pluripara, in her seventh pregnancy, was admitted into the lying-in-ward of Prof. Carl Braun, at 7 p.m., March 4th, 1883.

The history of the case, as gathered from the woman's incoherent ramblings, was, that the bag of waters had ruptured four days previous to her arrival in the hospital, and that, since that time, she had felt pain at irregular intervals. Subsequent examination rendered her statements doubtful.

Abdominal palpation revealed a small-sized fetus, presenting by the vertex. Fetal heart-sounds were loud, regular and frequent. By vaginal exploration, it was discovered that both lips of the os uteri were invaded by a neoplasm of globular form. The tumor in each lip was as large as a small-sized chicken's egg. The diseased tissue extended some distance into the cervical canal—two centimetres upon the right side, still higher up upon the left side—constituting a stenosis, which was passable for two fingers. Through the stenosis, the head, covered by the bag of membranes, could be felt.

The general appearance of the woman did not evince any degree of the so-called cancerous cachexia. At the time of admission into the lying-in-ward, the uterus was contracting with force, and pains, of an unusually severe character, were felt.

Prof. Carl Braun was immediately summoned by the clinical assistants, Drs. Felsenreich and Pritzl, in consultation.

Cæsarean section was suggested, but was rejected for the reasons: 1. That the fetus was immature, although viable, and its chance for life slight. 2. Such an operative procedure would afford the mother the minimal benefit.

Hysterostomatomy, that is, deep incisions into the cervix, right and left, followed by podalic version and extraction of the fetus, was regarded as impracticable. Prof. Braun proposed, as a last resort, that turning be effected after the method of Braxton Hicks, and that the child be extracted immediately after that operation.

Under Prof. Braun's supervision, Dr. Felsenreich succeeded, by external and internal manipulation, in turning the child. The extraction was effected with some difficulty, after the woman had been thoroughly anæsthetized. The placenta was expelled, after Credé's method, with ease. The parturition was immediately followed by an alarming hemorrhage. It was found, upon vaginal exploration, that the cervix was lacerated upon the right side to the extent of five centimetres, the rent extending into the parametrium. Both broad ligaments were at once transfixed and ligated with double ligatures. The lower third of the collum uteri was excised, after the arrest of hemorrhage, and the lips of the os amputated with Hegar's suture. All hemorrhage had by this time ceased, and there remained two holes in the upper portion of the vagina,

passable for the half-hand, one leading into the uterine, the other into the peritoneal cavity.

During the operation the patient was placed in Sims' position; the anæsthetic employed was the English mixture of chloroform, absolute alcohol, and sulphuric ether. The operation as thus performed, constituted a high amputation of the cervix uteri, completely removing the carcinomatous mass, after turning and extraction of the fetus. The child, male, weight 2070 grammes, length 47 centimetres, was immature and was born apparently dead. It was speedily revived by the employment of Gustav Braun's balloon catheter, and is now in a thriving condition in the Foundling Hospital.

The mother experienced little shock from the operation, and, at the time of writing—ten day's after the operation—is in a promising condition. Her temperature during this period has not reached 39.5° C. Pulse and respiration have been nearly normal. Copious irrigation of the cervical portion with 2½ per cent. solution of carbolic acid in the half-sitting posture, was instituted upon the second day after the operation, and is continued at present. The vaginal discharge is considerable in quantity and has a slightly offensive odor.—*Medical News.*

A Fetus which Remained Fifty-Five Years in the Body of its Mother. M. Suppez, in a communication to the Academy of Sciencés (*La France Médical*, Sept. 4), made some interesting remarks relative to the prolonged retention of fœti. He referred to such remarkable instances as that of Toulouse, 26 years; that of Sens, 28 years; that of Pont-a-Mousson, 30 years; that of Joigny, 31 years; that of Seinzel, 47 years; and finally, that of Quimperlé, 55 years, the specimen of which he presented. He gave two theories to account for this remarkable preservation; the old one of petrifaction—the fœti so preserved resembling fossils. The immediate principles of their bodies being replaced molecule by molecule by a gypsum, a silicious or calcareous substance, in such a manner as to change their substance without affecting their form or volume. Billement affirmed that the fetus of Pont-a-Mousson was petrified. Bartholin, who saw the fetus of Sens in the cabinet of curiosities of Frederick III., King of Denmark, affirmed that it was as hard as a stone. The second theory was that of progressive dessiccation. Neither the fetus of Seingel, of Joigny, or of Quimperlé, were petrified, and the petrifaction of those cited remains a contestable statement. The fetus of Quimperlé was not desiccated, and so a third theory must be broached to explain not only why a dessiccated fetus should be preserved for so long a time, but also why it should be preserved when not dessicated.

The case in question was that of a woman who became pregnant at 28 years of age, and who enjoyed good health up to the age of 84, when

she was admitted to the hospital of Quimperlé, and died in three weeks' time. The autopsy showed a tumor independent of the uterus and along the course of the right ovarian tube, formed by a cyst whose walls were extremely hard, with an irregular mamillated surface. On opening the envelope which appeared to belong to the mineral world, a child was found which had not undergone any alteration; it presented the ordinary attitude of the limbs flexed upon the trunk, the head bent upon the chest. The two pupillary membranes were perfectly developed, testifying to an age of six to seven months. The cutaneous covering, the superficial organs, the viscera in the great cavities of the body, all the muscles and all the soft parts had preserved their consistency, their pliability and their normal color.

To account for this condition of things, M. Sappez, recalled the demonstration of Pasteur where he showed a balloon (toy) containing pure air and the blood of a healthy dog, and another containing fresh urine which had been preserved for forty-eight days in a stove at a constant temperature of 30° C. without undergoing any change. Here, nature had thrown an envelope around the fetus which contained neither air nor germs and the putrescible material was thus enabled to resist putrefaction.—*Journal of Amer. Med. Association.*

II.—GYNECIC.

A Case of Laparotomy: For the Relief of Internal Hemorrhage from Rupture of Fallopian Tube, Complicating Tubal Gestation—Death from Shock.—By Charles K. Briddon, M. D., of New York, Surgeon to the Presbyterian Hospital, in *Annals of Anatomy and Surgery:*

Mrs. K. I. K., aged twenty-eight, a short, stout brunette, measuring five feet and less than one inch, and weighing one hundred and fifty-five pounds, is the mother of two children, one three years, the other thirteen months old. She has always enjoyed good health. Her last normal menstruation occurred on the tenth day of August, 1883. Two months subsequently, on the tenth day of October, she had a flow of clotted blood accompanied by pain of an intermittent character. On the sixteenth day of the same month, while out walking, she was taken with sudden severe pain, and was obliged to sit down for some minutes. The pain continued with diminished severity until and after she reached home. When I saw her she was suffering considerably. The pain was pelvic, and did not appear to be more acute on one side than on the other. It was continuous, but aggravated at uncertain intervals by paroxysms of increased severity. She says that when the pain attacked her in the street she felt something flow from her vagina, but on examining her linen found it only soiled with a little mucus. She complained of being unable to urinate. There was no increase of temperature; no accel-

eration of pulse or respiration. On making an examination I found the os low, and slightly displaced forward. It was soft, and dilated sufficiently to admit the first phalanx of the index finger. The body of the uterus was exquisitely sensitive and enlarged. Though the physical conditions of retro-version were not present, I thought the inability to urinate might be occasioned by some mechanical impediment. I emptied her bladder, and placing her in the knee-elbow position, found that on opening the vulva the uterus receded, and there was nothing at all to be felt in the cul-de-sac. Rest and a few doses of chlorodyne for treatment, and in a few day she was well.

In the afternoon of the 29th she was again attacked with pain, although there was no flow, I suspected that abortion was imminent, and prescribed an anodyne and rest. I received a second urgent message to see her at 7 p. m., and found her suffering from symptoms of internal hemorrhage. She exclaimed that she was dying. Her extremities were cool, her face was pallid, and I could detect no radial pulse. I had no hesitation in expressing the opinion that the case was one of tubal pregnancy, and that rupture had taken place. I explained the dangerous character of the condition to her husband, the probability that prompt action would have to be taken, and I requested counsel. Dr. H. F. Walker saw the case with me before nine o'clock. and suggested that we should call in Prof. T. G. Thomas, who saw the patient at half-past nine. There was no division of opinion, all were agreed that an abdominal section and the institution of such means as would secure against the further escape of blood, were the only ones calculated to afford even the slightest chance of recovery. The consent of the patient and her friends being obtained, the only delay was occasioned by the insistance upon their part that she should receive the sacrament before the operation.

I was ably assisted by my friends, Drs. Gerster, Walker and Scharlau, and it affords me great pleasure to testify to the kindness and promptness with which they responded to my call for assistance under very trying circumstances. Ether was administered by Dr. Scharlau, and very little indeed was used. The corpulence of the patient made it necessary to make a long incision, reaching from the umbilicus to the pubis. Her collapsed condition rendered this almost a bloodless proceeding. When the peritoneum was exposed a small incision was first made, which gave exit to a large amount of fluid blood. The incision was then enlarged sufficiently to admit the hand, and at least a pint of blood clot was scraped out as rapidly as possible. The uterus was then drawn up as far as its connections would permit, and the cause of trouble was at once apparent. Part of the ovum, one inch and a quarter in diameter, was found protruding from a rent in the left fallopian tube, close to its uterine extremity. The broad ligament was lifted as much as possible, and a probe armed with a double stout plaited silk ligature was passed through

it as low down as could be done, and the ends were firmly secured above the free border. In these manipulations the ovum was forced from its bed in the oviduct, and was removed entire. The hemorrhage appeared to be entirely controlled. The ligatures were cut short, and the toilet was completed by thorough cleansing of the cavity. The wound was then closed by silver-wire sutures. No time was lost in completing the dressing, the patient was removed at once to bed, surrounded with blankets and hot bottles, her head was enveloped in a warm woolen shawl, a small hyperdermic of morphine was adminstered, and the subcutaneous use of brandy resorted to. It was not, however, until after midnight that an occasional flicker could be felt in the pulse at the wrist. Vomiting, which occured, was treated by frequent sips of hot water; nutrient and stimulent enemas were used all through the night. On the morning of the 30th her appearance was much improved. She was inclined to talk, was even cheerful, and expressed herself as entirely free from pain. She only complained of vomiting. But, notwithstanding these favorable signs, her pulse could scarcely be felt, much less counted; at times it could not be distinguished at all. Temperature was 101°, respiration 36. At 10 a. m. her pulse could be counted 126, and after this it improved for twenty-four hours, averaging 130. Temperature for the same period 101 to 102. In spite of the most assiduous stimulation, the circulation could not be maintained. She began to sink on the afternoon of the 31st, and died at 9.30, forty-seven hours after the operation.

Sectio Cadaveris. Oct. 31, 11 p.m.—Abdomen only moderately distended, abdominal wound agglutinated, but easily separated; omentum adherent to peritoneal surface in the neighborhood of the line of incision; no general diffuse peritonitis. About two ounces of odorless bloody fluid in the cavity of the pelvis; the left broad ligament adherent to anterior wall of rectum; uterus enlarged to nearly twice its normal dimensions. At the junction of the left oviduct with, and encroaching upon the cornu itself, was an ovoid swelling about one inch in diameter, darker than the surrounding structures, of a mottled violaceous-maroon color. Near the junction of the posterior wall of the duct with this swelling was a ragged opening, half an inch in length, and leading into a cavity formed mainly out of that portion of the duct that traverses the uterine wall, so that the specimen might be said to represent the variety known as interstitial, or, more correctly, sub-interstitial. On incising that portion of the cavity that was developed at the expense of uterine textures, it was found filled with adherent coagulum. The cavity of the uterus was not lined with decidua, and the uterine opening of the oviduct was impervious. Outside the rent were found the ligatures applied during life, and which had effectually controlled the hemorrhage,

REMARKS.

About twenty years ago a surgeon of this city—the late Dr. Stephen

Rogers—was a vigorous advocate for the performance of laparotomy in cases of internal hemorrhage due to rupture of the oviduct; but the profession at that time was not prepared to accept the proposition. The great advances that have been made in abdominal surgery since then has paved the way, and although I am not aware that the operation has been performed, I can state advisedly that the matter has been much debated, and that the views of Dr. Rogers are now generally approved. Grail̈y Hewitt says, in the last edition of his work on the pathology, diagnosis, and treatment of the diseases of women :

"In cases of fallopian pregnancy, if it were possible to make an exact diagnosis of these cases of rupture and hemorrhage during life, it would, undoubtedly, be better to open the abdomen and endeavor to secure the bleeding vessels than to allow the patient to die of hemorrhage. No operation of the kind has ever been attempted, but the subject has formed matter of dissussion on more than one occasion at the meetings of the Obstetrical Society of London."

Lawson Tait, in his recent book "On the Diseases of the Ovaries," says:

"I have very little doubt, however, that many of these cases would be saved by prompt action. The difficulty is, of course, in the diagnosis, some certainty of which is requisite before an abdominal section can be performed. I have twice been on the point of performing abdominal section on account of suspected rupture of a fallopian tube, and have been prevented by scruples as to the correctness of the diagnosis. In both cases, post-mortem abdominal section showed that the suspicion was correct, and I believe both of these patients might have been saved."

Other authorities might be quoted indorsing the opinions thus expressed, but I think these will suffice to show the general conclusions of those most familiar with the subject. In the case that forms the basis of this communication, the subject of transfusion was entertained and rejected. Previous to the operation I could only conceive that it would have been harmful. Where we have to deal with concealed hemorrhage and there are such doubts as to its precise location and character as may render it questionable whether we are warranted in adding the shock of an operation to that already existing, the issue of the case will depend upon the success with which we can keep the circulation at a minimum consistent with life. If we resort to means which raise arterial tension, we shall interfere with the conservative process which we initiate with more or less success in the application of hemostatics, and certainly cause further leakage from partially occluded vessels. In this case, after the blood supply was cut off by the application of ligatures, I had faith in the natural robustness of the patient, and though she hovered between life and death for twenty-four hours, the condition of the pulse after that time and up to within a few hours of death justified the confi-

dence I had placed in those resources. The heart failure, which occurred more than forty hours after the bleeding was arrested, I attributed to shock, which I did not think could be beneficially influenced by transfusion, and consequently did not feel warranted in resorting to a means that I certainly do not regard as free from danger.

Injections into the Uterine Tissue.— Dr. Schücking proposes to treat certain maladies of the uterus by injecting the medicament directly into the substance of the organ. We believe that this expedient, which he brings forward as new (*Berliner klin. Wochen.*, No. 27, 1883), has been often employed in this country. The advantages of this method are two: it is local; it causes much less pain than subcutaneous injections. The remedies so employed are ergotin, Fowler's or Pearson's solution of arsenic, tincture of iodine, carbolic acid, and some other agents. The principal diseases thus treated, are subinvolution, chronic metritis, fibroids, and some forms of displacement. For the performance of this operation the ordinary hypodermic syringe suffices, but the needle must have the necessary length to reach through the speculum into the uterus. Only concentrated solutions are suitable, since the tissue of the organ is too compact to admit more than a few minims.

That this method is not a mere fancy, is proved by its employment in this city at the present time. We happen to know that a competent and enterprising female physician is using in this way a solution of carbolic acid, five per cent. in strength, for the relief of uterine cancer. The solution is freely injected into the tissue immediately subjacent the cancerous mass. Too short a time has transpired to permit any opinion as to the ultimate result of this method. It has, however, removed the very severe pain which the poor patients were suffering.

Influence of Worry and Nervous Shock on the Uterus and its Functions.— Dr. William Goodell, in a clinical lecture delivered at the hospital of the University of Pennsylvania, discusses the potent but much neglected factor of worry and mental shock in the production of uterine ailments. The *modus operandi* of this factor is, of course, through the nervous system. It causes irregular distribution of nerve-fluid; this leads to irregular distribution of blood; more blood goes to one organ than to another. The most exacting organs during the woman's menstrual life are the womb and its annexes, the ovary, the vagina, the erectile tissue around the womb, the broad ligaments, and the fallopian tube. They receive more blood than they should. There is increased nutritive action, vegetations develop, and the womb increases in size.

While this cause does not do away with the necessity of local treatment of local lesions, such treatment must prove ineffectual unless attention is also paid to the constitutional disturbance. The best thing to do in such

cases is to put the patient to bed and have her well rubbed and treated with electricity. Where from the circumstances of the patient such treatment is impracticable, the next best thing is to give some remedy to tone down these nerve centers which are not behaving themselves. The valerianate of zinc and quinia, take it all in all, is the best combination which we can give. A triple valerianate as follows is a good combination:

℞ Zinc valerianatis.....
Quiniæ valerianatis.....
Ferri valerianatis..... ää gr. xx

M. et ft. pil., No. xx.

Sig. One three times a day.

After a time, give strychnia in small doses, gradually increased. A tablespoonful of extract of malt three times a day in milk is also beneficial. It is a good plan to take one dose of the malt at bed time.—*Medical Age.*

Chloroform during Labor.—Thos. D. Savill, M.D., (*British Medical Journal*), believes that, with the following precautions, the use of chloroform in labor is perfectly justifiable.

1. There are certain women who have a tendency to flood at every confinement, and others in whom there seems an already too great relaxation of fiber—weak anemic females in their eighth or tenth confinement; and to these it would be unadvisable to give chloroform, except for necessity. Happily it is not these women who suffer the most pain, but rather those strong, healthy primiparæ, whose pelvis and genital build approximate the masculine type.

2. We should not give it when labor is complicated with severe vomiting, or with acute disease of the heart or lung, unless there be imperative call for it.

3. It should not be given to the full extent, except for operation, convulsions, or spasm of the cervix, and then it is necessary that one person should devote his entire attention to it.

4. The inhalation should be stopped as soon as we find the pulse becoming very weak, or the respiration irregular.

5. Any symptom suggesting a fatty or enfeebled cardiac wall should make us cautious in the use of chloroform. Here, as in cases other than those of labor, it is not the most extensive valvular disease (so long as it be attended by compensating hypertrophy) but the atrophied or degenerate wall that constitutes the source of danger. Unfortunately, the signs of these conditions are subtle and uncertain; but a fatty heart may be suspected when there is a very feeble cardiac impulse, combined with an almost inaudible first sound; or attacks of dyspnea, vertigo and syncope in the absence of anemia or valvular lesion; or the copious deposit

of fat in other parts of the body, and the occurrence of dropsy without adequate cause. A dilated heart may be suspected by an increased area of precordial dullness, combined epigastric and venous pulsation, and a want of correspondence between the violence of the cardiac impulse and the strength of the pulse. Pericardial adhesions also form a great source of danger. They may be suspected when the heart's apex is fixed above its normal position and does not shift with respiration, or when there is depression instead of protrusion of the intercostal spaces over the position of the apex, giving a wavy character to the cardiac impulse.

6. In all cases we should take extra care to prevent the occurrence of hemorrhage after birth, by giving a full dose of ergot in a little warm water when the head reaches the perineum, by stopping the chloroform the instant it is born, and by rousing the patient from her lethargy as soon as possible.—*Medical News.*

Epithelioma of Cervix Uteri—Recovery without Operation.—Cases of the above have been recorded from time to time, and upon perusing the reports of such cases carefully one can scarcely arrive at any other conclusion than that if actual recovery does not take place, such a degree of improvement does take place that we can scarcely blame the fortunate attendant for designating the result as recovery.

It has long been observed that under certain circumstances, such as high general pyrexia, as in the case under notice, erysipelatous inflammation around the affected part, other inflammations, such as that produced by the injection of irritants in the vicinity of the diseased portion (Duplouy), or like that produced by the actual cautery in the affected mass (Gallard), or around it (Nussbaum), a normal cell growth may, and occasionally does, take the place of the abnormal growth characteristic of cancer.

Such a case has been recently reported in the *Deutsche Med. Zeitung* by Dr. Staffhorst, of Ottendorff, Hanover. There appears to be no reason to doubt the accuracy of the diagnosis. The case was under observation several months; it resisted every method of treatment, the patient going almost steadily from bad to worse, and it was not till an unexplained attack of pyrexia, preceded by violent rigors, occurred, that any improvement took place. It might be supposed that the pyrexia was due to an attack of pelvic cellulitis, or peritonitis, and that this in some way modified the cell development of the diseased portion; but the report appears to negative this supposition. No mention is made of pelvic inflammation, and it is scarcely likely that such a complication should have remained undiscovered, or that no mention should have been made of it had any been noticed. Whatever the cause may have been, the progress of the disease seems to have been arrested immediately after the occurrence of the pyrexia; the hemorrhages and offensive discharges ceased, and in

the course of a few weeks the ulcerated surfaces were covered by cicatricial tissue. Some shortening of the vagina had taken place, posteriorly the cervix had become attached to the vagina, and some tenderness remained in the hypogastrium, especially after long standing. The patient's appetite was good, and she had increased in weight and strength, so that up to the date of the report, four months after cicatrization, the improvement promised to be permanent. Upon the whole, we may conclude from the report of this case, taken in conjunction with expressions by other recent writers, that the prognosis in any particular case is not absolutely unfavorable, and it remains for us to follow up the faint glimmerings of hope that are here and there vouchsafed us.—*Med. Press.*

III.—DISEASES OF CHILDREN.

The Time and Manner of Weaning.—The Commission permanente de l'Hygiène de l'Enfance of the Paris Academy of Medicine offered a prize in 1880 for the best essay on the subject of weaning. None of the productions offered at that time were deemed worthy of a prize, so the committee determined to invite further competition on the same subject for 1882. Ten memoirs were sent in in answer to this second appeal, six of which were regarded as worthy of note, and of these, two were especially commended. The report of the committee was made to the Academy at its meeting on June 26, 1883. (This learned Society, it will be remembered, devotes its entire energies to the advancement of science, and eschews politics. Hence its regular meetings are not interrupted from early spring to autumn.) After a short analysis of each of the essays submitted, the report closed with a concise summary of the most practical suggestions contained in the approved memoirs. These conclusions were briefly as follows: Generally speaking, the child should be fed at the breast during at least the first year of life. The term weaning should be understood as indicating the time at which the child ceases to be suckled and begins to be fed with other food than breast-milk. The weaning of an infant fed at the breast should be a progressive process, for too rapid weaning is often attended with fatal consequences. Gradual weaning is best accomplished by supplementing the mother's milk for cow's milk. This should be given in a bottle, as the effort of sucking excites glandular secretion, and, if possible, it should be withheld until the third or fourth month. After the sixth or seventh month a little farina, oatmeal, starch, or bread may be added to the animal milk to make a thin pap. At the end of a year eggs and butter may be used and bouillon may be substituted for milk in preparing the gruel. At the end of eighteen months or two years vegetables and fruits may be allowed, but meat and wine only after this time. The meals should be given at regular hours, twice a day to begin with, and the intervals be-

tween the times of nursing should be increased at first during the night. When about to complete the process of weaning, it is important to choose: 1, a time at which the infant is in perfect health; 2, the interval of calm which separates two dental crises, as after the cutting of the third group or the first molar teeth, or after that of the fourth group or the canines; 3, a season of medium temperature, as spring or fall, so as to avoid equally the great heats of summer and severe cold of winter. All the writers commented upon the lamentable ignorance of this subject displayed by the mothers of France (and they might have added, of the world at large), and suggested that mothers and nurses should be instructed in the elementary duties of their station by means either of printed tracts or public lectures. A valuable suggestion, no doubt, but one which it is to be feared will prove very difficult of practical application.—*Medical Record.*

Compound Fracture of the Thigh in a Newly-Born Infant Caused by the Use of the Blunt Hook.—Recovery.—By A. A. Johnston, M.K.R.C.P.I. ET L.R.C.S., Ed.; Surgeon of Parkes District Hospital, N.S.W., in the *Australasian Medical Gazette.*

About twelve months ago I was called to see a young woman in her first confinement. Upon examination the os uteri was found fully dilated, and the breech just entering the pelvis. I examined about an hour afterwards and found the breech firmly impacted in the pelvis, the pains being very strong and regular. I determined to wait for a couple of hours to see what nature would accomplish. When I again examined, after the lapse of three hours, I found that there had been no advance. The pains were now beginning to grow weaker, and there were evident signs of exhaustion setting in. I therefore determined to effect delivery by use of the blunt hook, which I now applied round the right thigh. The woman was very restless, tossing about in the bed. The midwife became very much frightened and left me, so that being left alone I was unable to control the patient. When at length, after considerable difficulty, the child was born, it was found to have sustained a compound fracture of the right femur immediately below the trochanter, the lower end of the bone projecting through the wound to the extent of about an inch. At the time I thought the case hopeless. However, I lost no time in putting the fracture up in card-board splints, and then placed the infant in a rocking chair, which served instead of a cradle, tying the leg up to a bar placed across the arms of the chair at a right angle to the body, which itself acted as a counter extending force. By removing the bars at the back of the chair absolute cleanliness was insured to the child, with perfect immobility of the fracture, whilst the rocking of the chair soothed the infant, yet in no way disturbed the fracture. After remaining in this position for two weeks the splints were removed, when the fracture was

found to be firmly united, but a calico bandage was then applied for a few weeks longer. The child, which at the present time is a little over a year in age, is now running about and has no deformity or shortening.

I think this case worth recording, as such accidents are rare, and complete recovery after such accidents must be rarer still. I have used the blunt hook upon many occasions, but never before had such an accident happened to me, and in this case I attribute it entirely to the restlessness of the patient.

It may be said, "Had chloroform been used such an accident would not have occurred." True, but as I do not generally use chloroform with bush patients I had none with me, and even if I had I do not think it would have been prudent to have used it, having no one to administer it and no one to help me in case of accident.

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Infantile Leucorrhœa.—Clinical Lecture delivered at the College of Physicians and Surgeons, New York, By Prof. T. Gaillard Thomas.

The little girl, nine years old, whom I first bring before you, is suffering from a very profuse leucorrhœa, which her mother informs me, she has been unable to cure by any of the remedies which she has employed, and which has now lasted for two months. I, of course, made a vaginal examination, and, on seperating the labia, I found that the whole vulva was about the color of red flannel, and bathed with a copious leucorrhœal discharge. The meatus urinarius was also seen to be in the same condition and urethritis has, no doubt, been set up by the spreading of the irritation. If it had been necessary, I could have introduced a small glass speculum into the vagina; but this was not required to make a diagnosis, as I saw exactly what was the matter without resorting to this.

Not infrequently mothers will bring their little girls to you in this condition, and they will sometimes be in a state of great agitation, because they are afraid the trouble has been the result of injury done the children. There is ordinarily no reason whatever to suspect anything of the kind, and you can at once quiet the anxious mother's mind. The affection is a perfectly simple one, and is perfectly curable also. What is it, then? It is generally known as infantile leucorrhœa; but infantile vaginitis would be a better term for it.

Now as to its causes. One of the most frequent of these is neglect of hygienic precautions. There is generally no intentional neglect on the part of the mother or nurse, but, on account of the undeveloped condition of the part, an accumulation of hardened secretion sometimes collects in the same way as that which not infrequently give rise to balanitis in the male child. Another common cause is the depreciated condition of the child's system, such as that due to spanæmia, in which all the mucous membranes are apt to become more or less affected. Thus, there is often gastric and intestinal, as well as nasal catarrh. A third cause that may

be mentioned, is, reflex influence from the rectum. The cause of the irritation in the rectum is usually ascarides, and an influx of blood to the part is caused by the itching and irritation.

In some instances, the ascarides, by getting into the vagina itself, are the direct cause of the trouble. The prognosis of this affection is, that it can be cured at once if it is properly treated.

In the treatment, the first thing to do is to see if there are any worms present, and if so (or there is any reason to suspect that such is the case), use an injection of warm salt water, as this form of ascaris (*the ascaris vermicularis*), as well as others, is unfavorably affected by salt. The next thing to do is to get the child's general system in the best condition possible by appropriate food, iron, vegetable tonics, and the hypophosphites. It is better to depend on nourishing diet, however, than on medicinal agents. If, after the worms have been gotten rid of, the vaginal irritation and discharge should continue, or if no worms should be found to be present, local treatment will be required. The vagina should be thoroughly washed out by means of a syringe provided with a small nozzle, which ought to be well oiled before being introduced. In order that the canal may be perfectly cleansed, the child should be placed upon the back. In some cases the mere removal of the accumulated secretion, which is a constant source of irritation, is all that is necessary; but if the trouble has gone on for some time, this may not be sufficient. Something further is then needed, and one of the best applications to use is the old-fashioned black wash (calomel and limewater) in the strength of one ounce to the pint of water. Before using this (which should be done twice a day) an injection of simple warm water should be made. I have never yet seen a case of infantile leucorrhœa that could not be cured by such treatment as this; so there is no necessity of resorting to astringents and nitrate of silver, which may, perhaps, do harm. If it is adopted here, I have no doubt that in less than two weeks this child will be entirely well.

But there is one mistake which is apt to be made by the physician in these cases, on account of which a much longer time may be required for a case than is at all necessary, and that is, the failure on his part to show the mother or nurse how to introduce the nozzle of the syringe properly. Mothers, unless they are especially instructed in regard to this point, never carry the nozzle more than an eighth of an inch up into the vagina, and as it is above this that degeneration pus is found, there will be no improvement, simply because the injections fail to reach the real source of trouble. It is not enough even to show the mother how to use the syringe, but you should also watch her do it, and see that the upper part of the vagina is reached. In a child of this age, the rectal tube of a Davidson syringe should be employed.—*Chicago Medical Journal and Examiner.*

Chorea in Infants. By J. C. IRONS, M.D., Huntsville, West Virginia.

Having rather an unusual case of chorea, I thought it might be of some interest to the profession to give you a note of it.

On March 5th I was called to see Mrs. O., a lady nearly forty, in her ninth labor. She had been unwell for some days, and was in the hands of a midwife. On examination, I found everything normal, minus the pains. I gave three five-grain doses of sulphate of quinine, which brought on labor very promptly. She had an easy delivery, giving birth to a large, well-developed male child. All seemed to do well for about six days, when the mother informed me she noticed some queer muscular twitchings about the arms, at first, and it became so violent that the family was terrorized with the "*idea of fits.*" I was called in on the eighth day from delivery, and found the child having spasmodic muscular twitchings of face and extremities, sometimes unilateral and at others bilateral. It seemed perfectly well, excepting bowels rather loose. I prescribed subnit. bis. for bowels, and thinking the trouble to be caused by irritation, gave brom. pot. and brom. ammon. for the convulsions. This treatment mitigated but did not remove the trouble. I then prescribed tr. ferri chlor., liq. pot. ars., *aa* ʒss.; aq. ʒj. Sig.—One drop in water three times a day. On the tenth day the child was entirely well, and has been doing finely ever since. I have read Flint, Niemeyer, and Beach on the chorea, and neither mention any case so young, but all say it is rare before the second dentition, and is most frequent in badly nourished children, and usually females. Others say it is due to a rheumatic diathesis, all of which was absent in this case.—*Gaillard's Medical Journal.*

Convulsions in Children.—W. T. Plant, M.D., in *Archives of Pediatrics.* As likely as not your first patient will be a baby in a fit. The seizure has been sudden; the appearances are appalling; death is thought to be imminent and you are sent for because near at hand and likelier to be *in* than the older and usual family attendant. It may be a new experience for you and in dismay you ask yourself what you shall do. I will tell you.

In the first place, go! "Stand not on the order of your going, but go at once!" Indeed the summons is so urgent that you can hardly do otherwise. And as you go you may get comfort from the thought that quite likely the fit will be over and the child asleep by the time you arrive and also that a convulsion does not very often end fatally.

We will suppose that the fit is not over and that you find the little one in such a condition as I shall now describe. It is lying perhaps in a small bed-room. The ladies of the block or neighborhood, as many as can get in, are there, consternation in their faces and pity in their hearts, all anxious to help if they only knew what to do. The patient is really in a pitiable state. The whole body is in violent uncontrolled action. The facial muscles are twitching, giving to the features the most fright-

ful expressions. The mouth distorted; and often the lips and chin are covered with bloody foam. The eye-balls are turned up under the lids, or to one side, or are rapidly jerked this way and that. The lingual muscles take part in the general mêlée and frequently the tongue is severely lacerated by the teeth. The head is drawn down to one side by a succession of spiteful jerks. Generally the face is livid from congestion; exceptionally it is pale. The arms and legs are in ceaseless convulsive movement. The forearms are rapidly bent and extended on the arms; there are alternate movements of incomplete pronation and supination and the limbs are twisted and drawn into various awkward and gotesque shapes. Unusually, the legs are less roughly dealt with than the arms.

The respiration is hurried and superficial; in some cases it is quite suspended for a time owing to rigid spasm of the thoracic muscles. This is a chief danger of fits in young infants—fixation of the respiratory muscles. Older children almost always recover their breath in time. Often there is a guttural noise that sounds as if the patient was in great distress.

If you can get your ear over the heart you will probably find it in tumultuous action; not wholly because of its share in the convulsion, but chiefly, perhaps, because of the agitation of the body and interference with the circulation. The pulse is variously affected, but I have hardly ever been able to count it owing to the constant movements of the body and the jerking of the muscles.

There is no outcry, or appealing look or other sign of conscious suffering. General and special sensibility are apparently abolished. A copious perspiration bedews the surface.

These are some of the observations that you may make but you must make them instantly. It is a time for action rather than for clinical research. What shall be done? First, evoke order from confusion. Here are good ladies longing to be of use give them something to do. Ask one of them to provide a plentiful supply of hot water; and another to look up a bath or wash tub. If the child is in a small room, assign to another the task of carrying it to a larger one and loosening the clothing at the neck and waist; or better, of removing all clothing and wrapping in a flannel blanket. Probably by this time the bath is ready. See that the water is warm enough. It ought to be from 95° to 97° F. Ask one or two of the attendants to place the patient in it, immersing to the neck. Unless the child is very young, it is a good plan to stir a handful of mustard with the water of the bath. If the head is hot and the features dark from congestion I would at the same time wrap the head with a cloth wrung from ice-water; but I would not do this when the appearances are those of cerebral anæmia. If unable to procure a utensil large enough for the general bath, the feet and legs must be thrust into

a pail of hot water with mustard. In most cases you will observe a speedy decline in the violence of the movements, and in a few minutes they will have ceased. There is an almost magical relaxing power in a general hot bath.

The fit being over, the child is to be wrapped in warm flannels and laid in bed. I like Ellis' plan of wringing woolen cloths from the hot mustard water of the bath and after sprinkling with a little more mustard winding them about each leg and foot. Be careful not to excite too much action in this way.

It is my habit to give a full dose of bromide of potassium and to repeat it in an hour or less if there are any symptoms of nervousness. From two to five grains may be given to child of two years. It is often effectual in preventing a return of the trouble.

But sometimes the fit is prolonged notwithstanding the hot bath, or it gives way only to come again. My next resource would be chloral by the rectum. Do not give too much. From three to six or eight grains in a teaspoonful of starch or mucilage is a safe and usually an effective dose.

If the fit still persists or shows evidence of returning, you will do well to resort to an emetic. To this end you may give, when the child can swallow, from three to five grains of ipecac or its equivalent of the syrup, repeating in a few minutes if there should be occasion. Independently of its power to empty the stomach of offending matters, an emetic will sometimes put an end to convulsions that have resisted other treatment.

These measures, one or all of them, are almost always effectual, but if in spite of them the fits should continue, I would resort to anæsthesia by inhalation; not continously but as may be necessary to hold the convulsive movements in check. Remember that for prolonged administration ether is a safer agent than chloroform. Authors have always recommended and do still recommend blood-letting when the face is turgid and the convulsions are strong and the child robust. I believe it to be, in this condition, a reliable and valuable remedy and I would not hesitate to resort to it if success delayed to follow the means already advised. I can well believe that there may be occasions when a prompt venesection may save a congested brain from irremedible injury.

But at length, by fair means or by foul, the eclamptic condition disappears and is succeeded by a period of stupor, amounting usually to a heavy slumber. But even in sleep you may frequently notice a jerking of the limbs; sharp, flexion of the fingers and toes; twitching of the muscles about the mouth and half open eyes—appearances that warrant the conclusion that the tendency to convulsions is not yet over.

After the subsidence of the spasms and while you are modestly receiving the grateful thanks of the mother and the the plaudits of the neighbors for your efficient treatment and able generalship, you may inquire and speculate as to the cause of the attack. Here you enter a broad field, for convulsions in children result from numerous and widely differing causes. Anything that irritates or disturbs the nervous system of an infant may plunge it into fits. We are not surprised to find that they attend on structural disease of the great nerve centers. In hydrocephalus and meningitis, both cerebral and cerebro-spinal, you will often meet with them. In fact, I think cerebral hyperæmia is the commonest of causes and that, as you know, may come from many disorders. Transient fevers from indigestion and taking cold as well as typhoid fever, pneumonitis, pleuritis may cause fits through high temperature and active congestion of the brain. Dentition is likewise a fruitful cause, partly through nervous erethism and partly through cerebral congestion. Severe cases of whooping-cough are occasionally attended by convulsions, caused, we may suppose, by a passive congestion of the brain.

If you practice in malarial districts you will observe that in infants the cold stage is often marked by a convulsion rather than a chill.

It is not unusual for the exanthematous diseases to begin in this way. Both scarlet-fever and small-pox are sometimes introduced by fits of so violent a character that life is destroyed before any eruption appears. In some of these cases our knowledge of the cause is conjectural rather than certain; in others it is made certain by the appearance of a characteristic eruption after death. I have also known diphtheria to herald its coming by convulsions. There is no doubt that in such cases the poison of the disease shares with the cerebral hyperæmia in producing the result, for in other instances spasms ensue from deleterious substances circulating in the blood as after large doses of opium, veratrum-viride, aconite or belladonna.

You may note it as an interesting fact that cerebral anæmia as well as hyperæmia may be a cause, opposite conditions giving rise to the same symptoms. Large losses of blood and exhausting diarrhœas that rapidly render the brain anæmic, not seldom lead to convulsions.

Furthermore you may very often find the cause in an overloaded stomach. One day I was hurriedly called to the Fifth Ward to see a suckling whose father had fed it, in the mother's absence, with hard boiled eggs. Two terrific fits were the result, but after a vomit it was as well as ever.

Worms, especially the lumbricoid and ascarides, sometimes excite eclamptic spasms, but not nearly so often as the laity think. "*Worm* fits" is an old phrase that is still used much more frequently than there is any actual warrant for.

Strong emotion is an occasional cause. Many a child has been "scared into fits." Outbursts of passion have had the same effect; sudden injuries also, partly through pain as well as fright.

There have been many instances of nurslings being thrown into spasms through disturbances of the maternal system by anger and inebriety and the onset of acute diseases as also by the return of the menses.

I must not forget to mention the fact that all serious disorders in children are in their latter stages liable to this symptom. The physician learns to dread *late* convulsions. They show that the disease has made a profound impression upon the nervous system and they are very apt to precurse a fatal termination.

I could mention other causes but I have said enough to convince you that almost any disease or accident may in some children lead to convulsions. And you will be more fortunate than I have been if, on some occasions, with your best efforts you do not fail to ascertain the cause.

The liability to eclampsia—for such is the name often employed to designate convulsions—is not the same at all ages or in all children. I think you will find it most frequent during the second and third years, though many older children are not strangers to it. Many escape altogether though exposed to the causes that produce it in others. Some children I have known to have a convulsion with the onset of every trifling ailment. A highly sensitive and nervous temperament is favorable to their appearance and temperaments are inherited; so that eclamptic seizures are common among the children of some families, rare in others.

You will naturally ask if there are any prodromal symptoms—symptoms that herald an approaching attack. Occasionally there are appearances that may give an inkling of what is to happen. Such are twitching of the facial muscles and grinding of the teeth in sleep; waking suddenly in fright; strong flexion of thumbs and fingers; drowsiness in the day and unusual petulance on being disturbed. The smiles or "angel whispers" of sleeping infants are but the contractions of certain facial muscles in response to some irritation of the nervous system. Timely attention to these phenomena may ward off an attack of general convulsions.

But many times there are no premonitory symptoms whatever and the child leaps at one bound from full health into a terrific fit.

Not all cases are so severe and frightful as the one I have described. The seizure may be so light as to seem scarcely more than a transient nervous perturbation. Sometimes only one side of the body is affected; and indeed when it is bilateral, one-half is usually more convulsed than the other. Grinding of the teeth, rolling of the eyes and flexion of the digits are but convulsions in miniature.

The fits are variable in number and duration. Often there is but one;

sometimes there are many following hard on one another. A single one does not last more than three, or five or ten minutes as a usual thing; exceptionally for half an hour. In one case that occurred in my practice some years ago, a lusty boy was taken suddenly in the morning and was in strong convulsions, with an occasional remission but no intermissions, for twenty-one hours when he died. This was one of the cases in which I was entirely unable to ascertain the cause.

Whether light or severe, a convulsion is but a symptom and your prognosis will always depend on your conviction as to the nature of the cause. If there is progressive cerebral disease there is small ground for hope. If the cause is trivial and transient as teething or indigestion, the outlook is hopeful however severe the spasms may be. Occurring at the outset of acute febrile diseases, they are not to be regarded as of unfavorable omen, though some rare cases of variola and scarlatina must be excepted; but occurring in the course of and especially near the natural termination of these disorders the outlook is serious and experience will teach you to be chary of strongly encouraging words under such circumstances.

There are remote as well as immediate dangers from eclamptic fits. Paralyses of various parts may remain, though these are not usually, I think, permanent. In such cases we may presume that some lesion of the brain, as hemorrhage, occurs as the result of the convulsion.

Some children are left in a lasting condition of semi-idiocy. In my own practice a promising girl was taken in strong convulsions in the middle of the night. For some time after, they were often repeated leaving her in a giddy and unbalanced mental state which time has not improved. In another case in which the fits were equally without forewarning or apparent cause, the power of speech was for a long time nearly gone. In that respect the patient has improved, but she is still of a spiteful temper and given to fits of ungovernable passion.

Regarding treatment I have some things to add to what I told you at the outset. "Forewarned is forearmed." When your attention is asked to an infant that has premonitory symptoms—jerking tendons, fixed thumbs and fingers, half-open eyes, grating teeth, etc., that is your opportunity for forestalling trouble. Give a cathartic as a grain or two of calomel with magnesia, or three grains of hydrargyrum cum creta with castor oil; give a hot mustard foot-bath and a dose of bromide or valerian at bedtime, repeating as there may be occasion. If the bromide alone will not control these symptoms I would combine chloral with it in quantities of from two to five grains.

If you find hot and swelling gums over advancing teeth use the gum lancet as I shall direct when I talk to you of dentition. I have known great apparent relief from this little operation.

Fits so often result from disturbances of digestion that you will natur-

ally inquire if the child has eaten of improper articles. But whether you find a cause in dietetic errors or not, if the abdomen is tumid, the tongue coated and the breath offensive, you are justified in resorting to purgatives. I know of none better for this condition than those above recommended. One grain or even a half grain of calomel well rubbed with sugar frequently acts very happily.

Bearing in mind the possibility of worms as a cause, I am much in the habit of combining santonine in a suitable dose with the above laxative or giving it with castor oil.

Though not appropriate in most cases, though even harmful in some, there are occasions when opiates are of the utmost service in warding off convulsions. I refer to cases of cerebral anæmia from loss of blood, or profuse diarrhœa, attended with pale features and, if the child is under one year, with a depressed fontanelle. Severe pain also affords an indication for their use. In a drop of laudanum or its equivalent of paregoric with brandy or bourbon and the hot bath, you will find, I think, your best safeguards.

The diet of children subject to fits should be carefully attended to. It ought to be nourishing, but plain. Milk, bread, oat-meal and potatoes with lean meat now and then should be the staples. Occasions of excitement, anger and fright should be avoided. There should be daily exercise out of doors, and a daily cool bath. Attendance on school had better be deferred until the health is completely re-established.

A Preventive of Infant Mortality.—Science in its last issue states, on the authority of a German scientific journal, that milk preserved by what is known to chemists as Scherff's process possesses certain qualities which make it exceptionally useful for sick infants. This process consists in simply putting new milk without any addition into glass bottles, stoppering and then heating by steam for one or two hours to a temperature from 212 to 248 degrees, under a pressure of from two to four atmospheres. The London *Chemical News*, in announcing last year Martiny's examination of the milk thus treated, said: "The milk is thus not merely rendered capable of preservation, but the caseine is peptonized, so that in contact with the gastric juice it is converted into fine, easily divisible and digestible flocks, as in the milk of a non-ruminant animal." Another excellence of Scherff's milk is that the virus of foot-and-mouth disease and tuberculosis, with all germs, is destroyed by the heating.

The caseine of human milk is slightly alkaline and coagulates in light flocculi in the infantile stomach, so as to be readily acted on by the digestive fluids, while cow's milk, even when fresh, is feebly acid and is apt to form large and firm coagula. Cow's milk treated by the Scherff's process, however, according to the German authority quoted, is not coagulated by rennet, and even when acidified or allowed to sour yields

"a fine granular coagulum," which the infant can digest without distress. It is apparent that this new milk is the nearest approximation now known to nature's food for infants; and when the latter is wanting, as it too often is, the former should be the best substitute.

The terrible infantile mortality during the "heated term" in our large cities is undoubtedly owing largely to the injudicious use of cow's milk and to the impure quality of the article. But this simple process of rendering cow's milk harmless seems to offer a summer diet for infants, which, while not expensive, would, if generally used, greatly reduce the death rate. "The good results obtained by its use for sick children," says this foreign journal, "are ascribed to the granular coagulum which it yields in the stomach and its freedom from germs."—*The Proceedings.*

Pre-Natal Influences as Affecting the Teeth.—By Geo. H. Cushing, D.D.S., Professor of Operative Dentistry in the Chicago Dental Infirmary, says in the *Chicago Medical Journal and Examiner.*

In considering the pre-natal conditions that may influence the character of the teeth, we must start with the proposition that perfect and healthy children can only spring from perfect and healthy parents.

While this implies that just so far as the parents diverge from the conditions of physical perfection and health, just so far will the offspring be physically imperfect and unhealthy, yet it will hereafter be seen that this proposition must to some extent be qualified.

Considering man simply in the nature of an animal, it would seem not unreasonable to suppose that if he were living in a purely natural state he would be almost or quite free from defective teeth.

So far as we know, the wild animals are, as a rule, exempt from disease of the teeth, and they reproduce their kind with close approach to perception of type; and, were the animal man under like natural conditions, the same results ought to be predicted of him.

But whether the conclusions naturally to be drawn from the last proposition, viz., that decay of the teeth is a disease due to civilization, be accepted or not, it probably will not be denied that man is living, in a certain sense, in an unnatural condition, and the state which we term civilization tends more and more to force him into artificial conditions of life, farther and farther removed from the simple methods intended by nature for his existence, and that this must tend in a greater or less degree to modify his physical condition.

So we are forced to consider this question from the standpoint of the present status of man with reference to his perfection or otherwise as an animal, and his healthy and unhealthy condition.

Under what conditions, then, do we as a general rule see the reproduction of the species conducted? In no case where either parent is in a perfect physical condition, and often with one or both parents in an ab-

solutely unfit condition to become progenitors because of their being in a pronouncedly unhealthy condition.

Parents in the last stages of consumption, with incurable diseases of many kinds, with scrofulous diatheses, and those with constitutions utterly wrecked by over indulgence and long-continued violation of the laws of health, or by reason of repeated attacks of various acute diseases, are continually and always bringing children into the world.

What can be expected of the offspring of such parents? Only that their organizations will be to a greater or less extent imperfect even under the most careful attention to the conditions of the mother during the period of gestation and lactation.

In so brief a paper as this, it would be impossible to go to any extent into the consideration of all the pre-natal influences which might modify the condition of offspring. The laws of heredity under which certain types may be handed down from remote ancestors; the accidents and acute diseases to which the most healthy women are liable during pregnancy; and the seeming contradictions of physiological laws in well-known observed cases, all these things have a marked influence, but they can be only incidentally alluded to.

Under the general proposition that only healthy parents can beget healthy offspring, it becomes apparent that the utmost care and attention should be given toward perfecting the health of the mother from the moment of conception till she ceases to nourish her child.

This care of course secures the highest possible development of the child in all respects, but its importance as regards the teeth is greater than in any other direction, for the reason that the teeth retain with comparatively little modification, the character which is given them at the time of their formation. The other parts of the body may have been but imperfectly nourished and so but imperfectly formed and developed and yet the recuperative power of the constitution may subsequently bring up to a near approach to health that which was imperfectly begotten, while the teeth will always bear testimony to their imperfect original construction. Consequently everything that tends to promote the health of the mother is indispensable to the perfection of the teeth, while everything calculated in any degree to lower the standard of health in the mother will be sure to prove more or less injurious to the teeth of the child.

It would be a work of supererogation to enumerate here the course and methods that mothers should pursue to secure the highest physical condition,—the whole matter would be summed up by saying she should conform entirely to hygienic laws, but it will never be out of place to emphasize the importance of mothers giving extraordinary attention to this subject.

You need only to cast your glance upon any hundred mother's whom

you have known during the period of the rearing of their young, to note how entirely indifferent they generally seem to be with regard to this matter. The lives of excitement they lead, the late hours they keep, the pernicious habit of tight-lacing that many of them follow, their neglect of exercise and the kind of food they eat, all tend to show their indifference while the persistence in such habits can tend to but one result, viz.: the bringing into life of very imperfectly formed and poorly nourished offspring.

In a general sense there can be no controversy with regard to the propositions thus far so briefly laid down, and yet we see occasionally seeming contradictions of them. We may sometimes see parents of very poor physical condition, and whose teeth are of the poorest quality whose children will prove to be remarkably healthy and their teeth will astonish us by their strength and immunity from decay (caries). In such cases the law of heredity may and doubtless does play an important part, and the child probably inherits from remote ancestors the fine physique and strong teeth which belonged to neither of his immediate ancestors.

On the other hand, we may see the very reverse of this in the case of parents who are in comparatively perfect physical condition, with strong and sound teeth whose children will have an imperfect physique and very frail teeth. The same law of heredity may also explain this anomaly.

Again, we may find that a mother who will be in miserable health during the entire period of utero-gestation, whose appetite will be poor and capricious, and who does not take sufficient or properly nourishing food, may bring forth the most robust and healthy child, while on the other hand a mother who may pass through this entire period seemingly in perfect health, and who may strictly observe hygienic laws, will produce a delicate and sickly child. These last cited cases are in seeming contradiction to physiological laws, but they, with the others referred to, are only exceptions to the general rule and must not be counted on as any excuse for the slightest relaxation of vigilance over the health of all mothers during the period of gestation and lactation.

Of the influence of food upon the teeth, it might be thought that what has already been said would cover the whole ground, but it does not fully do so. Of course, if we have had healthy parents to deal with, and they understood the laws of hygiene, and appreciated the importance of the strictest compliance with those laws, there would be no necessity for saying anything more. But, unfortunately, we have not such people to deal with generally; and sometimes those who have an understanding of what is proper, and who seek to do all in their power to secure the highest physical condition for themselves, and consequently for their offspring, are unable, from diseased or morbid conditions, to obey every hygenic

requirement. Many mothers, during the period of child-bearing, are very capricious in their appetites, often craving food that is the least desirable for them on general principles, and loathing that which would most certainly supply the requisite elements for their own and their child's complete nourishment. In such cases we must attempt to supply, by artificial means or by specially prepared foods, the elements which fail to be assimilated in the ordinary way.

As affecting the teeth especially, though also the general system the lack of the phosphate of lime in the tissues, is particularly observed in cases like those just referred to. These phosphates should be furnished in the ordinary diet in ample proportions; but in some cases, as above stated, the mother cannot, and in others *will* not, use the proper diet; while in other cases, in which the most desirable food is taken, and, although digestion seems to be perfectly performed, yet the phosphates are evidently not thoroughly assimilated.

In many cases where the phosphates fail to be assimilated from the natural food they do seem to be from other sources.

It has been claimed by some practitioners that they have succeeded in materially improving the conditions of the teeth of offspring by the administration to mothers during pregnancy of the crude phosphate of lime.

Later, the syrup of the lacto phosphate of lime was introduced and extraordinary claims were made for it by the French physician who first called attention to it. He claimed that by the preparation of the phosphate of lime with lactic acid it was partially digested before being taken into the stomach, and thus was more easily and surely assimilated. Many practitioners, both of dentistry and medicine, feel confident that they have seen excellent results follow its use.

Another form of phosphates which greatly commends itself, is the preparation of wheat phosphates made by E. H. Sargent & Co., of Chicago. This seems to furnish an admirable method of administering the required elements, and is perhaps preferable to any other. It is simply a condensed and easily digested form of phosphatic food, though there may be cases in which the syrup of the lacto phosphate of lime would be more easily tolerated.

There can be no question but that the habitual use of Sargent's preparation or of the syrup, by mothers during pregnancy and lactation, is likely to prove beneficial to the teeth of the children, and also to those of the mothers, and it should always be prescribed where there is probability of imperfection in the dental organs from either inheritance or impaired health of the mother.

The administration of either should be intermittent—that is, it should be used, say for a month, and abandoned for a month, then resumed and again abandoned, and so on.

Imperfectly as this subject has been presented, it should arouse the attention of the profession to the importance of urging upon all our patients, who are about to become mothers, the great necessity and the duty of their using every means within their reach that is likely to tend toward improving the teeth of their offspring, and to this end dentists should ask the cooperation of the family physician, and of the husband, which will be readily and gladly accorded when once its importance is apparent to them.

The younger members of the profession should give this subject their serious consideration, for the amount of good they may accomplish by making one of the cardinal principles of their practice the urging of this pre-natal care upon their patients can never be fully estimated, while the laurels they may win in establishing successful prophylactic treatment will be those they may well be proud to wear.

Editor's Table.

DR. R. S. SUTTON, of Pittsburgh, Pa., following the example of Keith and Lawson Tait, has opened a private hospital for abdominal surgery. Mr. Henry Phipps, Jr., of Pittsburgh, has contributed the expenses of twenty-five ovariotomies, to be done by Dr. Sutton for respectable poor women, from any part of the country; these women to receive the same care and attention as the wealthy. Several have been done, and all have recovered.

THE CINCINNATI OBSTETRICAL SOCIETY. — The annual election of officers of this Society took place January 10th at the office of Dr. J. Trush. The following officers were elected for the ensuing year:

President—Dr. C. O. Wright.
Vice-President—Dr. W. H. Wenning.
Recording Secretary—Dr. Clara Ellsbury.
Corresponding Secretary—Dr. James G. Hyndman.
Treasurer and Curator—Dr. George E. Jones.

STATISTICS OF BRITISH OVARIOTOMISTS.—The following communication has just come to hand in reference to this subject:

"7, THE CRESCENT, BIRMINGHAM, January 11, 1884.

"*Sirs:* My attention has been drawn to a statement in your columns by Prof. Goodell, to the effect that British ovariotomists do not publish their incompleted operations nor the cases on which they decline to operate. This may be true of some of my countrymen, but I desire to point out that, of one at least, it is not true. I never have, in a single instance,

declined to operate, and I publish every operation I perform in its order of date and in its proper series. I forward you an example of my method of publication, than which you will see that nothing can be more complete, and you will see that my ovariotomy mortality is under four per cent.—as a matter of fact, it is now under three per cent.

"I am, etc., LAWSON TAIT."

We are in receipt of Dr. Lawson Tait's paper narrating "An account of one hundred and ten consecutive cases of abdominal section performed by him since November 1, 1880, published in the *Medical Times and Gazette*, November 5–26, 1881."

The honesty of Dr. Lawson Tait's reports, and that he includes *all* his failures with his successes in making up his statistics, we never doubted; nor do we think for a moment that Dr. Goodell would individually charge him with even a prevarication.

UTERO-OVARIAN DISEASE AMONG THE INSANE.—The Board of Trustees of the State Lunatic Asylum at Harrisburg, Pa., appointed Dr. Margaret A. Cleaves in charge of the female department, and she entered upon her duties on the 1st of September, 1880.

Evidently the work could not have been placed in better hands, for the reports of 1881 and 1882 are most carefully and ably written, and show Mrs. Cleaves to be, not only an enthusiastic worker, but one who is able to report the results obtained fairly and dispassionately, without being influenced by any preconceived hopes or desires.

Dr. Cleaves began her work, believing that there was much to be done for the insane women, and convinced that a large proportion of the female insane were subject to some form of utero-ovarian disease. She hoped to throw light upon a subject heretofore "not only unexplored, but to a great extent ignored." During the first year fifty women were examined, and in every case disease was found sufficient to produce more or less nervous and mental trouble in a sane woman. During the year thirteen cases were discharged cured, and of these nine were subjects of chronic uterine disease. They were all under treatment, and with the improvement in the local trouble the mental improvement took place. Three of the number were thought to be incurable, and, to all appearances, their return to mental and physical health was due to the relief of the local disease. Four of the twelve discharged as improved were subject to uterine disease, and here again the mental improvement appeared due to the improved physical condition. Dr. Cleaves is not ready to say, however, that these diseased uteri stood in the relation of cause to the mental disorder, but, whatsoever the relation, one thing is sure, that by receiving proper medical attention the condition of the insane has been rendered more tolerable. Although the percentage of recoveries is not greater than it has been heretofore, Dr. Cleaves is not discouraged, one year

being too short a time to show much improvement in the per cent. She, however, says the year's work bears out the view that such disease exists to a great extent among the insane, and "that it *may* sustain the relation of cause to effect, and that it does, in some cases, perpetuate a wrong state of thinking and feeling."

In the report for 1882, among the eighty-five admissions, twenty-nine were treated for various forms of uterine disease, although this does not include the whole number affected, but only those whom it was deemed expedient to place under treatment. Six of those discharged recovered had uterine diseases of long standing, and nine of the fifteen discharged improved, were also under treatment with decided benefit. Dr. Cleaves says:

"Statistics thus far accumulated will not warrant the statement that either the mental recovery or improvement is attributable to the relief from the special disorder, yet it is rational to suppose that it has some effect, and that these patients have been placed in a better physical condition thereby than would have otherwise been attainable. My additional experience, although yet too limited to be sufficient criterion, does not confirm me in the *hope* which I had, that the number of recoveries would ultimately increase. The work of a series of years might bring about different results.

"Briefly formulated, my conclusions then are as follows: That a large proportion of women in insane hospitals have some form or another of utero-ovarian disease; that many of those under treatment make marked mental and physical improvement coincidently with the improved local condition; that in a majority of cases, however, this improvement, owing doubtless to the long standing of the combined physical and mental disorder, only reaches a certain point, beyond which it seems impossible to make further gain.

"And further, if the special attention is productive of no untoward effect, and in the large majority of cases it is not, it should be skillfully and faithfully administered. The principle involved is a right one. It is rational to believe that the improved physical condition of those discharged recovered and improved, produced by their relief from the special trouble, renders them better able to meet and cope with the disturbing influences of life than they otherwise would be.

"And further, the lives of many women in hospitals are thereby rendered more comfortable and tolerable."

In the *Alienist and Neurologist* for January, 1883, may be found an article by S. Danillo, M.D., of St. Petersburg, on Female Diseases among the Insane. The author says in conclusion:

"The result of my researches may be summed up as follows: The complication of insanity by sexual anomalies is very frequent during the persistence of physiological functions. After the menopause such com-

plications are rare. Pregnancy and delivery exert an influence in the production of these anomalies, and in their relation to the menopause.

"If the fact be admitted, that there is an intimate relation between the sexual nervous system and the central nervous system in the female, it will be readily seen that all irritation which pulsates from the sexual organs, may react strongly on the already affected brain. Here is found a vivid illustration of the saying of Maupertius, that infinitesimal causes frequently repeated, lead to important results."—*Western Lancet.*

Bibliography.

A Complete Obstetric Record. By JOEL A. MINOR, Ann Arbor, Mich.

This is a very complete record combining with it all desirable medical statistics. It is so well arranged that in a few minutes a full statement of the case can be briefly written out. It contains blanks for two hundred and forty cases and cost $1.25.

It is excellent for one in large practice, and also for those beginning, to keep in easy form for reference the experience of a number of years.

Woman's Work in the Field of Medicine.

A rather high sounding title for what turns out to be only an interesting announcement of the school in New York for training midwives. This project has already been highly commended by this journal, and Cincinnati would be a good field for its graduates as its population is so largely foreign. Besides no physician, man or woman, in general practice can afford to take many obstetric cases, if full justice is done them, on account of the time required. A good list of dietary articles is also included in this little book.

In a preliminary article it is said the Woman's College of the New York Infirmary of the City of New York has not been successful, because in fourteen years they have graduated ninety-six; forgetting that it has always aimed at quality and not numbers.

If they had thought, one fact might have been mentioned about this college that would accord well with the title of the book, viz.: that this Woman's College was the first in the United States to introduce the progressive course of study into a medical college. The Woman's College of Philadelphia immediately followed its example, while all the men's colleges have not yet done so.

The old plan of study is as though one should enter Yale or Harvard and take all the studies from freshman to senior at once and keep them all through the four years. To have inaugurated a different plan is part of "Woman's Work in the Field of Medicine."